

ANTIQUE ELECTRONIC SUPPLY

2000 CATALOG

www.tubesandmore.com



6221 S. MAPLE AVE. TEMPE, AZ 85283-(480) 820-5411
FAX (480) 820-4643 FAX (800) 706-6789



GUITAR CABINET GRILL CLOTH

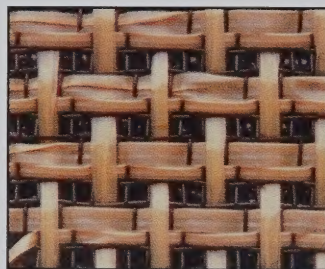
Replacement grill cloth as found on Fender and other vintage guitar amps. Cloth is 32" high. Order enough to cover the width of your cabinet, plus a bit for frayed edges. Sold per linear foot.

ACOUSTONE GRILL CLOTH

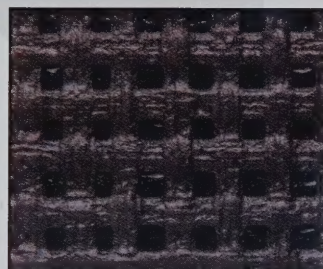
12" X 18" of modern grill cloth by Acoustone. Eight assorted patterns, our choice.

S-G114

\$10.00



**S-G298
BLACK/TAN WEAVE
\$7.50/ft**



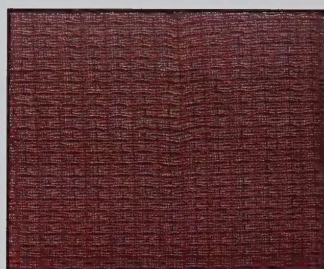
**S-G299
BLACK WAFFLE
\$7.50/ft**



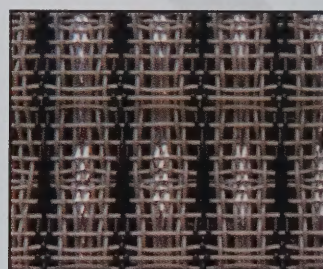
**S-G300
BLACK/GOLD
\$8.50/ft**



**S-G301
OXBLOOD/YELLOW
\$7.50/ft**



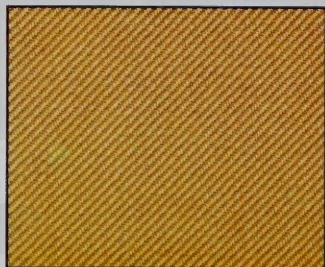
**S-G302
OXBLOOD
\$7.50/ft**



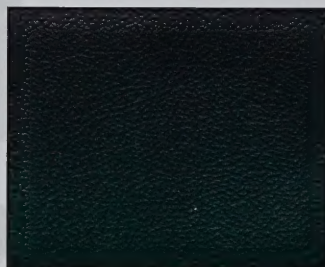
**S-G303
BLACK/SILVER/GRAY
\$8.50/ft**

CABINET COVERING

Replacement cabinet covering for Fender and other popular guitar amps. Tolex is 54" wide, Tweed is 56" wide, sold by linear foot.



**S-G305
TWEED
\$10.00/ft**



**S-G306
BLACK TOLEX
\$10.00/ft**



**S-G307
CREAM TOLEX
\$10.00/ft**



**S-G308
BROWN TOLEX
\$10.00/ft**

ANTIQUE ELECTRONIC SUPPLY®

(480) 820-5411 • Fax (480) 820-4643 or Fax (800) 706-6789 (US & Canada)

www.tubesandmore.com

OUR PRICING & QUALITY

We believe we provide competitive and fair pricing while maintaining the quality and integrity of the product. We feel that we can save you money by providing you with a reliable and timely source for your electronic component needs. We charge a handling fee of \$2.50 on each order. We have a \$10.00 minimum order requirement that can be waived with the understanding that the cost of shipping and handling may exceed the price of the goods purchased. **All prices and availability are subject to change.**

OUR GUARANTEE

All items in our catalog are guaranteed to meet your satisfaction or they may be returned within 10 days for exchange or credit. **Please check and/or test your purchases upon receipt.** even if the items are a back-up set for future use, and notify us of any problems within the warranty period.

We reserve the right to charge a restocking fee where no evidence of product failure exists if merchandise is returned after the 10 day period. No returns will be accepted without contacting Customer Service for authorization. (See below)

All **non-tube** items are warranted for 30 days.

All **new tubes** (except horizontal amplifier tubes, also known as "linear or sweep tubes") are guaranteed to meet manufacturers specifications for 90 days, except for breakage or when damaged by operation outside manufacturers' specified ratings.

All **used tubes** are guaranteed to meet minimum industry standards for used tubes and are guaranteed for 30 days. The same exceptions and conditions as noted above for new tubes apply to used tubes.

Linear/Sweep tubes are guaranteed for 10 days, except for breakage or when damaged by operation outside manufacturers' specified ratings. The following is a sample list of what we consider linear/sweep tubes (new and used tubes are included): 6DQ5, 6DQ6A-B/6GW6, 6HB5, 6HF5, 6JB6-A, 6JE6C/6LQ6, 6JG6A, 6JR6, 6JS6C, 6JT6A, 6JU6, 6KD6, 6KG6A/EL509, 6KV6A, 6LF6/6MH6, 6LR6, 6LX6, 6MJ6, 12JB6A, 12JF5, 12JQ6, 12JT6A, 17JQ6-A, 17JT6A, 17KV6A, 20LF6, 21JS6A/23JS6, 22JF6/22KM6, 22JG6A, 22JR6, 22KV6A, 24JE6C/24LQ6, 26LW6, 26LX6, 27LF6, 29LE6, 30JZ6, 30KD6, 31JS6C, 31LQ6, 31LZ6, 35LR6, 36KD6/40KD6, 36LW6, 36MC6, 40KG6A/PL519, AND 42KN6.

Please check all linear/sweep tubes upon receipt. If there is a problem, please notify us immediately. After your contacting us, we will take the tube back for evaluation by our technician. We will contact you with a decision about replacement or credit after the evaluation. **If the linear/sweep tubes are out of the 10 day warranty period we will not take them back under any circumstances.**

Should it be necessary to return merchandise for exchange or credit, please write, fax, e-mail or call with a reason for the return and you will be given a Return Authorization (RA). **Customer service is available by phone from 8am-10am and 2pm-4pm, Mon.-Fri.** All returns should be sent promptly; all returns must be received by us within 30 days or the RA number will become invalid. The RA number must be placed on the outside of the package being returned in order to assure that your return is handled in a timely manner.

DEALERS & RESELLERS

We suggest you test all tubes or any type of electrical product upon receipt as our warranty does not extend beyond you and ends when you resell the item.

C. O. D. CUSTOMERS

There is a \$5.50 COD fee on all orders shipping UPS COD service. All orders shipping COD require payment by cashier's check or money order unless payment by check has been arranged with us in advance. If we send an order to you COD and the order is returned to us by UPS for any reason other than an error by us, you are still responsible for UPS shipping charges. You will receive a notice stating that the package was returned. It will tell you why the package was returned and how much is owed in shipping fees. We ask that this amount be paid before another order is shipped to you. You can pay the amount when you place a new order by adding it to the COD total, or you can send a check for the amount owed.

HOURS OF OPERATION

We accept phone orders from 8:00 am to 5:00 pm (MST) Monday through Friday and from 9:00 am to 1:00 pm the first and third Saturday of each month (Saturday hours are subject to change, refer to our web site, the enclosed calendar or call for current Saturday hours). Fax orders can be sent 24 hours a day, 7 days a week. You can also browse our products and place orders over the Internet by going to our

web site at

www.tubesandmore.com.

INTERESTED IN REPAIR OR SERVICE, OR IN PARTS WE DON'T CARRY? LISTED BELOW ARE SOME OF THE FOLKS WE CALL WHEN WE NEED HELP. THESE ARE GOOD FOLKS (OR WE WOULDN'T LIST THEM!), HOWEVER, PLEASE USE THIS LIST AS A REFERENCE, NOT AS AN ENDORSEMENT OR RECOMMENDATION. USE GOOD BUSINESS SENSE WHEN DEALING WITH ANYONE (YES, THAT INCLUDES US)!

MUCH AS WE'D LIKE TO OFFER TECHNICAL ADVICE AND SERVICE, WE JUST DON'T HAVE THE TIME OR RESOURCES. PLEASE UTILIZE THESE OR OTHER FOLKS FOR YOUR DESIGN AND TECHNICAL NEEDS.

YOU CAN ALSO CHECK OUR WEBSITE www.tubesandmore.com FOR LINKS AND TECHNICAL NOTES. THE PICKINGS ARE FAIRLY THIN RIGHT NOW, BUT WE HOPE TO ADD TO THIS RESOURCE THROUGHOUT THE COMING YEAR. GOT SOME IDEAS FOR TECHNICAL NOTES? DROP US A NOTE OR E-MAIL (info@tubesandmore.com), WE'LL SEE IF WE CAN GET SOMETHING.

REPAIRS AND SERVICES

ANTIQUE RADIO

ANTIQUE RADIO STORE (CA)
619-268-4155
www.olderadiosrus.com

ANTIQUE RADIO
RESTORATION & REPAIR (CT)
Bob Esslinger
www.neca.com/~radiodoc

CABINET REFINISHING

MARK TOPPO (AZ)
TOPPO RESTORATIONS
602-439-3556

CABINET RESTORATION, RADIO REPAIR

KEN KROL (AZ)
602-604-8853
djkrol@earthlink.net

CAR RADIO

RAY'S AUTO STEREO (CA)
916-447-9753
fax 916-447-2725

EUROPEAN RADIOS

ROSS HOCHSTRASSER (MA)
BAVARIAN RADIO WORKS
781-447-4299

FISHER RESTORATION; ALL TUBE EQUIPMENT

AL PUGLIESE (NY)
"THE FISHER DOCTOR"
718-948-7489
fisherdoc@aol.com

GUITAR AMP, HI-FI

EVAN AURAND (CA)
408-578-3568

JIM MUNZER (AZ)
480-491-5975

WAGSTAFF MUSIC (UT)
Bob Cox
801-261-4555

GUITAR AMP REPAIR

MIKE ZUCCARO (CA)
619-271-8294
mjzuccaro@aol.com

IDLER WHEEL REPAIR

PREMIUM PARTS (WI)
516-536-5000

OLDER TELEVISION AND RADIO REPAIR

RADEBAUGH RADIO & TV (AZ)
602-963-5222

OLD TELEPHONE PARTS AND REPAIRS

PHONECO (WI)
608-582-4124

PHILCO PREDICTA

PHILCO PREDICTA SERVICE
& SALES (TN)
David Weddington
615-890-7498

78 RPM CARTRIDGE REPAIR

JOE SMOLSKI (MA)
508-879-2778

SPEAKER RECONING, FIELD COIL REWINDING

HANK BRAZEAL (AL)
Closed until 11-10-99
205-823-9257

THEREMIN (TUBE TYPE) RESTORATION & REPAIR

REID WELCH (FL)
305-665-4972
rewelch@earthlink.net

TRANSISTOR RADIO COSMETIC RESTORATION

ERIC WROBBEL (CA)
818-884-2282

TUBE HI-FI REPAIR, DESIGN, CONSTRUCTION

DON ALLEN (AZ)
602-244-1448

VICTROLAS - REPAIR AND PARTS

STEVE HINZ (AZ)
COLLECTOR'S MART
520-776-7969

PARTS & SUPPLIES

(that we don't have, of course!)

DIAL COVERS

DOYLE ROBERTS (AR)
501-745-6690
drob@artelco.com

DIAL SCALES - FOR ANTIQUE RADIOS, HAM, AUTO AND OEM

MIKE TOBIN (CA)
ROCK-SEA ENTERPRISES
805-646-7362
dials@juno.com

MANUALS

PETE MARKAVAGE (NJ)
732-238-8964

NEEDLES & CARTRIDGES

WEST-TECH SERVICES (FL)
941-471-0922

REPRODUCTION KNOBS; PHILCO ESCUTCHEONS

LARRY BORDONARO (CA)
OLD TIME REPLICATIONS
818-786-2500
oldtimerep@aol.com

VOICE OF MUSIC

VOICE OF MUSIC PARTS (MI)
Gary Stork
616-925-8841
gstork@concentric.net

REFERENCES

RECEIVING - TRANSMITTING - INDUSTRIAL

ORDERING TUBES - THE INS AND OUTS

We have over 3000 tube types which are new and stocked for immediate shipment. We stock both new old stock (NOS) and currently manufactured tubes. If you do not find your tube type listed, please contact us. Many types have equivalent numbers which we can cross reference. Tube types starting with letters follow the numerical listing.

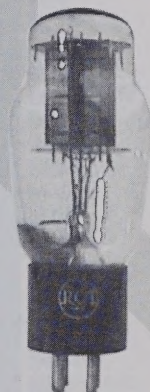
Also available are many used tubes in types that have become scarce or expensive. Tube types normally stocked used, as well as new, are listed on page 11. All used tubes have been tested by us and are guaranteed to meet or exceed the minimum industry standards for used tubes. All have been boxed by us in clean white boxes.

Many tube types are available in different envelope styles and are equivalent electrically. For example, 6A8 is metal, 6A8G is ST shaped large glass and 6A8GT is tubular shaped small glass. See the illustration below for tube styles.

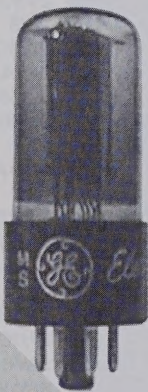
PRICES SHOWN ARE FOR CURRENT STOCK AND ARE SUBJECT TO CHANGE WITHOUT NOTICE. Because most tube types are no longer manufactured, quantities available are limited. Price and availability of tubes with "CALL" under PRICE will be quoted at the time of inquiry. Tubes are designated as "CALL" tubes when there is a low supply or when there are large fluctuations in the market price. Written quotes are good for 15 days. Special quantity pricing is available on some types. Used tube prices are generally about 50% - 60% of the new tube price. We also have some "Down n' Dirty" tubes at low prices for the experimenter. Call for price and availability.



S SHAPE
(Balloon, Globe)



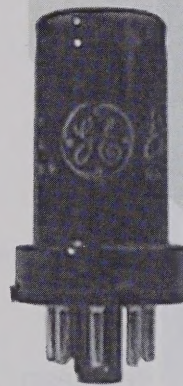
ST SHAPE
(Shoulder)



GT SHAPE
(Tubular)



LOCTAL



METAL



MINIATURE

MATCHING & SPECIAL SELECTION

Most output tubes can be supplied in matched multiples at a charge of \$2.00 per tube, except for low supply, high demand tubes ("CALL" tubes). Matching on "CALL" tubes varies and will be quoted at time of inquiry. We match transconductance and cathode current.

Specific brand, construction, or testing can be supplied for an additional \$1.00 per tube.

OUR GUARANTEE

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All used tubes are guaranteed to meet minimum industry standards for used tubes and are guaranteed for 30 days. The same exceptions and conditions as noted above for new tubes apply to used tubes.

Linear/sweep tubes are guaranteed for 10 days, except for breakage or when damaged by operation outside manufacturers' specified ratings. See page 1 for a list of linear/sweep tubes.

WESTERN ELECTRIC TUBES

We can supply some original Western Electric tubes. Please contact us for availability and pricing.

THE INFORMATION ON TUBES IN THIS CATALOG IS FOR SALES INFORMATION ONLY. IF YOU ARE INTERESTED IN SELLING TUBES TO US, PLEASE CALL OR FAX US TO REQUEST A CURRENT BID LIST.

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
01A (ST)	36.25	1D8GT	2.75	1S6	2.75	2E25	5.25	3CS6	2.75
0A2	3.80	1D21	27.20	1SA6GT	4.10	2E26	5.80	3CU3A	7.70
0A3/VR75	5.15	1DG3A	6.00	1SB6GT	4.50	2E30	7.70	3CV3A	5.70
0A4G	18.60	1DK1	3.40	1SX2	6.85	2E32	6.30	3CX3/3DA3	5.45
0A5	8.20	1DK27	2.75	1T2/U37	8.40	2E35/502AX	5.70	3CX300A1 (Svetlana)	99.00
0B2	4.85	1DK29	2.75	1T4/DF91	3.05	2E36	2.75	3CX800A7 (Svetlana)	Call
0B3/VR90	2.75	1DN5	2.85	1T5GT	2.75	2E42	6.30	3CX400A7 (Svetlana)	Call
0C2	6.30	1E4G	7.25	1T6	2.75	2EA5/2EV5	2.75	3CX2500A3 (Svetlana)	Call
0C3-A/VR105	4.35	1ESGP	2.75	1U4	4.45	2EG4	8.50	3CX2500F3 (Svetlana)	Call
0D3-A/VR150	4.10	1E7G	3.50	1U5	3.70	2EN5	2.75	3CX2500H3 (Svetlana)	Call
0E3/85A1	6.75	1E7GT	4.20	1V/6Z3	4.75	2ER5	2.75	3CX3000A7 (Svetlana)	Call
0G3/85A2	3.15	1EP1	25.00	1V2	2.95	2FH5	2.75	3CX3000F7 (Svetlana)	Call
0Y4	4.55	1F4	2.75	1V5	3.70	2FQ5A/2GK5	4.55	3CX10000A3 (Svetlana)	Call
0Z4-A	3.05	1F5G	3.05	1V6	3.70	2FS5	3.80	3CX10000A7 (Svetlana)	Call
1A3	2.75	1F6	2.75	1W4	10.50	2FY5	3.15	3CX10000H3 (Svetlana)	Call
1A4P	2.95	1F7G	4.10	1W5	4.55	2G21	14.50	3CX15000A3 (Svetlana)	Call
1A5GT	2.75	1F34 (Tesla)	8.00	1Z2	6.85	2G22	14.50	3CX15000A7 (Svetlana)	Call
1A7GT	2.85	1G4GT	10.00	2-01C	54.40	2GU5	3.80	3CX15000H3 (Svetlana)	Call
1AB5	Call	1G5G	4.35	2A3	72.45	2GW5	2.75	3CY3/3DB3	3.40
1AB6/DK96	6.20	1G6GT-G	Call	2A3 (RCA)	Call	2HA5/2HM5	3.40	3CY5	2.75
1AD2/1BY2A	2.75	1H2	2.75	2A4G	4.75	2HK5/2HQ5	3.15	3CZ3A	5.45
1AD4	3.80	1H4G	5.05	2A5	16.10	2K25	81.70	3D6/1299	3.15
1AD5	4.75	1H5GT-G	3.05	2A6	5.15	2K28/707B	24.25	3D21A	36.35
1AE4	Call	1H6G	2.75	2A7	6.75	2K41	10.95	3D21B	36.35
1AF4/1AJ4	4.00	1J3/1K3A	5.25	2A7-S	6.20	2T4	2.75	3D21WA/B	36.35
1AF5/1AH5	3.40	1J5G	3.40	2AC15	22.70	2V2	2.75	3DC3	8.20
1AG4	4.75	1J6G	8.40	2AF4	2.75	2V3G	2.95	3DF3-A	5.70
1AG5	3.15	1L4/DF92	2.75	2AH2	4.55	2W3	11.25	3DG4	5.45
1AH4	3.40	1L6	31.50	2AS2-A	4.35	2W3GT	10.20	3DH3	4.45
1AJ5	3.15	1LA4	4.10	2AS15A	23.65	2X2A/2Y2/879	2.75	3DHH12	2.75
1AK4	Call	1LA6	5.60	2AV2/2BA2	3.90	3-200A3/592	199.00	3DHH13	2.95
1AK5	3.15	1LB4	6.00	2AZ2	2.75	3-500ZG (China)	125.00	3DK6	2.75
1AN5/DF97	3.25	1LC5	Call	2B3	6.30	3A2	2.75	3DR3	11.35
1AU2	2.75	1LC6	3.05	2B4	6.85	3A3-A-C/3AW3	4.35	3DS3	10.30
1AU3/1N2A	2.75	1LD5	3.70	2B7	4.00	3A4	4.10	3DT6A	2.75
1AX2	2.75	1LE3/1LF3	4.20	2BJ2	4.55	3A5/DCC90	Call	3E6	3.15
1AY2	7.50	1LG5	3.25	2BN4A	2.75	3A8GT	2.75	3EA5	3.70
1B3GT/1G3GTA	4.10	1LH4	2.85	2BU2	6.00	3AF4A/3DZ4	2.75	3EH7/XF183	2.75
1B4T/951	5.70	1LN5	4.20	2C21/1642	5.80	3AL5	2.75	3EJ7/XF184	3.70
1B5	4.45	1M3/DM70	5.70	2C22/7193	7.25	3AT2B	4.85	3ER5/YC95	2.95
1B7GT	2.75	1M5G	2.75	2C26	4.55	3AU6	2.75	3FH5	3.70
1B23	18.20	1N3/DM71	5.80	2C33/RX233A	10.95	3AV6	2.75	3FQ5/3GK5	4.65
1B24	11.35	1N5GT/1P5GT	4.35	2C36	36.35	3AW2A	3.80	3FS5	3.40
1B32/532A	11.35	1N6G	3.15	2C40-A	40.90	3B2	4.35	3GW5	2.75
1B35A/6038	34.00	1P21	65.20	2C43/464A	26.70	3B4/DL98	2.75	3HA5/3HM5	3.90
1B59/R1130B	24.50	1P28	45.60	2C44/464	19.55	3B5GT	2.75	3HQ5	5.35
1BC2A	4.65	1P29	19.55	2C46	27.20	3B22/EL1C	26.05	3HS8	3.90
1BG2/DY51	2.75	1P32	Call	2C52	21.00	3B24	14.50	3JC6A	5.60
1BH2A	2.75	1P39	22.50	2C53	Call	3B25	20.90	3KT6	3.70
1BK2/1RK41	2.75	1P40	16.40	2CN3A-B	2.75	3B26	13.65	3LF4	2.85
1BQ2/DY802	2.85	1P41/924	18.20	2CW4/2DS4	4.65	3B28	32.90	3MP26	8.20
1BX2/1X2-B-C	2.75	1Q5GT	2.75	2CY5	2.75	3B29	34.00	3Q4	4.85
1C5GT	2.95	1Q6	3.70	2D21/PL21	3.05	3BA6	2.75	3Q5GT	3.15
1C6	3.15	1R4/1294	2.75	2DV4	8.75	3BC5/3CE5	2.75	3S4/DL92	2.75
1C7G	3.05	1R5/DK91	5.70	2DZ4	2.75	3BE6	2.75	3TF4A	9.15
1C21	19.55	1S2-A/DY87	2.95	2E5	10.30	3BF2	4.10	3TF7	36.45
1D5GP	3.40	1S4	2.75	2E22	38.25	3BL2A	5.15	3V4/DL94	6.85
1D7G	3.40	1S5/DAF91	2.75	2E24	6.55	3BM2	2.75	4-65A/8165	78.75

BALLAST TUBES

We have a large assortment of ballast tubes not listed here. Please call with your specific ballast tube requirement.

We also have the following universal replacement ballast tubes. If we can't supply the exact ballast you need, one of these may substitute. Your Choice, each \$10.85

Replaces Ballasts:

Universal Ballast #	Beginning with	Numbers from	Ending in
URB-001	BK, BL, K, L, M	10 to 23	A, B, C, D
URB-002	BK, BL, K, L, M	10 to 23	E
URB-003	BK, BL, K, L, M	10 to 23	F, G, H
URB-004	BK, BL, K, L, M	24 to 55	A, B, C, D
URB-005	BK, BL, K, L, M	24 to 55	E
URB-006	BK, BL, K, L, M	24 to 55	F, G, H
URB-009	BK, BL, K, L, M	60 to 92	F, G, H

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
4CJ4JH6	4.10	5BC3-A	Call	6A8GT	7.90	6AU8-A/6BH8	4.85	6BN11	7.25
4CB6/4DE6	4.20	5BE8	3.40	6A8MG	Call	6AV5GA	5.60	6BQ5/EL84	Call
4CPX800A (Svetlana)	Call	5BK7A	2.75	6AB4/EC92	4.00	6AV5GT	4.45	6BQ5/EL84 (Russia)	4.50
4CS6	2.75	5BQ7A/5BZ7	2.75	6AB5/6N5	10.95	6AV6/EBC91	3.30	6BQ5 (Sovtek)	4.95
4CX250B/7203	Call	5BT8	2.75	6AB7/1853	5.15	6AW8A	4.00	6BQ5 (Tesla)	7.50
4CX250BC (Svetlana)	105.00	5BW8	3.05	6AB8/ECL80	2.75	6AX3	2.75	6BQ6GTB/6CU6	3.70
4CX250BM (Svetlana)	Call	5CG8	4.00	6AC5GT	9.90	6AX4GTB	3.40	6BQ7A/6BZ7	3.15
4CX250B (Svetlana)	99.00	5CL8A/5BR8	4.00	6AC7/1852	3.70	6AX5GT	4.45	6BR3/6RK19	2.75
4CX250BT (Svetlana)	125.00	5CM8	2.75	6AC10	5.45	6AX7	6.85	6BR5/EM80	6.85
4CX250R (Svetlana)	125.00	5CQ8	2.75	6AD4	Call	6AX8	4.55	6BR7	17.25
4CX300A/8167	132.00	5CU4	8.20	6AD6G/6AF6GT	15.05	6AY3B	4.00	6BR8A/6FV8	4.35
4CX350AC (Svetlana)	Call	5CX1500A (Svetlana)	925.00	6AD7G	6.20	6AY11	2.95	6BS3A	Call
4CX350A (Svetlana)	Call	5CX1500B (Svetlana)	Call	6AD8/6DC8	4.65	6AZ8	9.80	6BS7	10.00
4CX350F/8322	134.00	5CZ5	3.80	6AD10	8.20	6B3	2.75	6BS8	4.75
4CX400A (Svetlana)	Call	5DH8	2.85	6AE5GT	Call	6B4G	36.55	6BT4/EZ40	6.85
4CX800A (Svetlana)	Call	5DJ4	5.90	6AE6G	4.00	6B4G (Sovtek)	24.95	6BU8/6KFK8	3.80
4CX1500A (Svetlana)	Call	5EA8/5GH8A	5.15	6AE7GT	Call	6B5	18.20	6BV7	10.20
4CX1600B (Svetlana)	Call	5EH8	2.75	6AE8	Call	6B6G	6.85	6BV8	5.60
4CX1600U (Svetlana)	Call	5ES8	3.50	6AF3	3.05	6B7	5.80	6BV11	Call
4CX3500A (Svetlana)	Call	5EU8	2.75	6AF4A/6DZ4	4.35	6B7-S	5.15	6BW3	5.25
4CX5000A (Svetlana)	Call	5EW6/5GM6	3.25	6AF9	5.80	6B8	4.00	6BW4	3.15
4CX5000R (Svetlana)	Call	5FG7	2.95	6AF11	Call	6B8G	3.15	6BW6	10.20
4CX7500A (Svetlana)	Call	5GJ7/LCF801	4.85	6AG5	2.75	6B10	5.25	6BW7	4.75
4CX10000A3 (Svetlana)	Call	5GS7	5.70	6AG6G/EL33	Call	6BA3	Call	6BW8	2.75
4CX10000D (Svetlana)	Call	5GX6/5HZ6	3.05	6AG7/6AK7	6.75	6BA5	5.45	6BW11	5.25
4CX15000A (Svetlana)	Call	5GX7	3.40	6AG9	8.10	6BA6/EF93	4.20	6BX6/EF80	2.75
4CX15000J (Svetlana)	Call	5HA7	2.75	6AG11	4.55	6BA7	8.10	6BX7GT	8.75
4CY5	2.75	5HB7	2.75	6AH4GT	3.50	6BA8-A	5.15	6BY5G	2.75
4D32	68.00	5HC7	2.75	6AH6	3.40	6BA11	5.60	6BY5GA	2.75
4DK6	3.30	5HG8	2.75	6AH9	5.90	6BC4	6.85	6BY6	4.45
4DL4	3.70	5J6/5MHH3	2.75	6AJ4	3.90	6BC5/6CE5	3.25	6BY7/EF85	3.40
4DT6A	3.40	5JK6	Call	6AJ5	2.95	6BC7	3.15	6BY8	3.15
4E27	44.00	5JL6	2.75	6AJ6	3.40	6BC8/6BZ8	4.75	6BY11	2.75
4EH7/LF183	3.25	5JW8	3.05	6AJ8/ECH81	6.10	6BD4-A	4.10	6BZ6/6JH6	5.05
4EJ7/LF184	Call	5KD8	4.55	6AK4	Call	6BD5GT	Call	6C4/EC90	4.55
4ES8	2.75	5KE8	5.80	6AK5/EF95	3.40	6BD6	2.75	6C5	3.25
4EW6/4GM6	2.75	5KZ8	4.35	6AK6	3.50	6BD7	4.00	6C5GT	3.25
4GJ7/4GX7	4.85	5LJ8	5.60	6AK8/EABC80	5.80	6BD7A/EBC81	6.30	6C6	3.70
4GK5	3.70	5MB8	4.85	6AK10	5.05	6BD11	4.20	6C7	4.45
4GS7	4.55	5MK9	9.15	6AL3/EY88	6.10	6BE3/6BZ3	5.25	6C8G	3.05
4GZ5	3.70	5R4GA	Call	6AL5/6EB5	2.85	6BE6/EK90	3.70	6C9	11.15
4HA5/4HM5	3.40	5R4GB	11.35	6AL7GT	4.00	6BF5	3.40	6C10	13.35
4HA7/4HC7	3.40	5R4GY-A-B	11.35	6AL11	5.35	6BF6/6BU6	2.75	6C33C-B (Sovtek)	39.00
4HK5	2.75	5R4WGA-B-Y	6.85	6AM4	2.95	6BF7	Call	6CA4/EZ81	10.40
4HM6/4JC6A	4.65	5RDDH1	4.55	6AM5/EL91	11.15	6BF8	3.40	6CA5/6EH5	3.15
4HQ5	3.70	5RK16	Call	6AM6/EF91	4.55	6BF11	6.75	6CA7/EL34 (US)	Call
4HS8/4KF8	2.75	5T4	6.65	6AM8A	6.30	6BG6G-GA	8.20	6CA7 (China)	8.60
4HT6	3.40	5T8	2.75	6AN4	4.20	6BH3-A	Call	EL34 (Tesla)	13.50
4JC6A/4JD6	5.45	5U4G/5AS4	20.80	6AN5	4.20	6BH6/E90F	3.80	6CB5A	5.25
4KE8	3.70	5U8	4.10	6AN5WA	4.20	6BH11	5.15	6CB6A/6CF6	3.40
4KN8/4RHH8	4.55	5U9/LCF201	3.80	6AN6	2.95	6BJ3	2.75	6CD3/6CG3	5.90
4KT6	4.85	5V4G	12.10	6AN7A/ECH80	8.20	6BJ5	10.20	6CD6G/6DN6	6.55
4LJ8	5.80	5V4GA	9.80	6AN8A	5.70	6BJ6/E99F	3.40	6CD6GA/6EX6	5.70
4LU6	3.15	5V6GT	2.75	6AQ4/EC91	12.00	6BJ7	2.75	6CD7/EM34	Call
4MK8	3.70	5W4	4.20	6AQ5A/6HG5	4.65	6BJ8	4.35	6CE3	Call
4MP12	6.30	5W4GT	4.00	6AQ6	2.75	6BK4-A-B	7.70	6CG7/6FQ7	11.00
4MP26	8.20	5X3 (ST)	20.40	6AQ7GT	2.75	6BK4C/6EL4A	16.80	6CG8-A	4.45
4PR60B/8252	Call	5X4G	Call	6AQ8/ECC85	12.00	6BK5	2.75	6CH8	3.40
4X150A/7034	49.90	5X8	2.75	6AR5	8.85	6BK7-A-B	4.75	6CJ3/6CH3	5.90
4X150A (Svetlana)	95.00	5Y3G	Call	6AR6	7.05	6BL4	2.75	6CJ5/EF41	4.75
4X150D/7035	73.75	5Y3GT	5.50	6AR8	4.85	6BL6	184.00	6CJ6/EL81	13.65
4X150G	62.40	5Y4G	Call	6AR11	3.90	6BL7GTA	7.35	6CK3/6CL3	Call
5AM8	3.40	5Y4GA	Call	6AS5	2.75	6BL8/6LN8	4.75	6CK4	Call
5AN8	2.75	5Y4GT	Call	6AS6	3.90	6BM6	124.00	6CK5/EL41	10.95
5AQ5	5.15	5Z3	6.20	6AS7G/6520	10.40	6BM8/ECL82	Call	6CK6/EL83	Call
5AR4 (China)	10.00	5Z4	5.35	6AS7G (Svetlana)	17.95	6BM8 (Svetlana)	11.50	6CL5	5.45
5AR4/GZ34	Call	5Z4GT	Call	6AS7GA	6.85	6BN4A	3.90	6CL6	5.70
5AS4A/5U4GB	12.60	6A3	Call	6AS8	3.70	6BN5/EL85	3.80	6CL8A	4.55
5AS8	2.75	6A4	6.95	6AS11	4.35	6BN6/6KS6	4.55	6CM3/6DN3	4.55
5AT8	2.75	6A5	31.50	6AT6/6BK6	2.75	6BN8	8.30	6CM4/EC86	4.85
5AU4/5V3A	3.80	6A5G	32.05	6AT8-A	3.80				
5AV8	2.75	6A6	5.45	6AU4GTA	5.70				
5AW4	3.05	6A7	Call	6AU5GT	6.00				
5AZ4	3.30	6A8	Call	6AU6A/EF94	4.55				
5B8	2.75	6A8G	Call	6AU7-A	5.90				

DELAY RELAY TUBES

We have a large assortment of delay relay tubes not listed here. Please call with your specific delay relay tube requirement.

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
6CM5/EL36	Call	6EA8	5.05	6GJ8	4.45	6JH5	9.45	6LT8	
6CM6	5.60	6EB8/6GN8	5.45	6GK6	7.35	6JH8	5.90	6LU6	4.00
6CM7	4.10	6EC4A	7.15	6GK17	5.05	6JK5	7.90	6LU8	6.10
6CM8	3.70	6ED4/ED500	10.20	6GL7	6.10	6JK6/6JL6	10.95	6LW6	28.70
6CN6/EL38	Call	6EF4/6EJ4-A	Call	6GM5	22.70	6JK8	3.05	6LX6	37.40
6CN7	4.35	6EH7/EF183	4.00	6GM6	5.25	6JL8	5.80	6LX8/LCF802	3.05
6CQ4/6DE4	3.15	6EH8	2.85	6GM8/ECC86	4.20	6JM6-A	5.90	6LY8	3.90
6CQ6/EF92	4.10	6EJ7/EF184	2.85	6GQ7	2.75	6JN6	4.75	6M11	7.15
6CQ8	4.75	6EM5	5.45	6GR7	5.45	6JN8	Call	6MA6	11.25
6CR6	2.75	6EN4	11.80	6GS7	4.35	6JQ6	3.70	6MB8	4.10
6CS6/EH90	3.90	6EQ7	2.85	6GT5-A	18.20	6JR6	30.25	6MD8	Call
6CS7	4.65	6ER5/EC95	5.25	6GU5	3.40	6JS6B	36.75	6ME6	39.20
6CT3	11.65	6ES5	2.75	6GU7	5.90	6JS6C	Call	6ME8	5.05
6CT7/EAF42	5.35	6ES6/6FD6	3.25	6GV5	6.20	6JT6A	29.40	6MF8	10.20
6CU5	3.80	6ES8/ECC189	6.75	6GV8/ECL85	3.40	6JT8/6KR8	4.85	6MG8	4.55
6CU7/ECH42	7.25	6ET6/EF98	2.75	6GW8/ECL86	7.05	6JU6	Call	6MHH3	9.00
6CU8	3.15	6ET7	2.75	6GX6/6GY6	4.10	6JU8A	4.55	6MJ6	61.95
6CV7/EBC41	4.20	6EU7	17.65	6GX7	4.00	6JV8	3.40	6MJ8	5.05
6CW4/6DS4	12.70	6EU8	2.75	6GX8/EAM86	10.50	6JW8/ECF802	5.90	6MK8	4.75
6CW5/EL86	4.55	6EV7	4.35	6GY5	5.60	6JX8/ECH84	4.10	6ML8	8.40
6CX8/6JA8	4.65	6EW6	5.70	6GY8	2.75	6JY8	3.15	6MN8	5.80
6CY5	5.35	6EW7	5.45	6GZ5	4.85	6JZ6	6.55	6MP17	2.75
6CY7	3.50	6EY5/6EZ5	4.00	6H1N	8.40	6JZ8	5.80	6MP18	3.15
6CZ5	Call	6EY6	Call	6H2N	5.25	6K5GT	3.95	6MQ8	5.45
6D2	3.40	6EZ8	3.90	6H4-GT	11.25	6K6GT	4.65	6MU8	7.70
6D4	6.20	6F1	8.40	6H6	2.75	6K7	4.00	6MV8	6.20
6D6	4.55	6F4	8.20	6H6GT	2.75	6K7G	5.15	6N4	Call
6D7	5.15	6F5/H63	4.75	6HA5/6HM5	4.65	6K7GT	3.80	6N6G	26.70
6D8G	Call	6F5GT	4.00	6HA6/6HB6	5.35	6K8	4.75	6N7	6.30
6D10	5.80	6F6	8.85	6HB5	15.54	6K8G	3.80	6N7G	10.00
6D22S (Svetlana)	4.00	6F6G	Call	6HB7	4.45	6K11/6Q11	8.20	6N7GT	8.20
6DA4-A/6DM4	2.75	6F6GT	Call	6HC8	4.55	6KA8	5.05	6N8/EBF80	5.45
6DA5/EM81	6.00	6F7	4.65	6HD5	5.45	6KD6	40.95	6P1	8.40
6DA6/EF89	8.85	6F8G	4.00	6HD7/6HJ7	2.75	6KD8/6U8A	5.15	6P5GT	14.50
6DB5	Call	6F15	8.40	6HE5/6JB5	5.90	6KE6	3.90	6P7G	7.25
6DB6	4.55	6F17	6.30	6HF5	16.00	6KE8	6.75	6Q5G	5.45
6DC6	6.95	6F33	7.25	6HF8	4.75	6KG6A/EL509	20.20	6Q7	4.00
6DC8/EBF89	3.80	6FA7	4.35	6HG8/ECF86	Call	6KH8/ECLL800	Call	6Q7G	Call
6DE6	2.75	6FC7	3.40	6HJ5	4.65	6KL8	2.75	6Q7GT	4.00
6DE7	4.75	6FD5	2.75	6HJ8	2.75	6KM6	8.95	6QL6	8.40
6DG6GT/6W6GT	2.95	6FD7	3.50	6HK5	4.00	6KM8	2.75	6R3/EY81	Call
6DHH12	2.75	6FE5	3.90	6HL8	5.80	6KN6	Call	6R7	3.15
6DHH13	2.75	6FG5	3.15	6HM6/6HT6	2.75	6KN8/6RHH8	17.00	6R7G/OM4	3.80
6DJ8/ECC88	8.40	6FG6/EM84	6.20	6HR5	2.75	6KT6	6.00	6R7GT	3.80
6DJ8X (Tektronix branded)	3.15	6FG7	4.55	6HR6	Call	6KT8	5.90	6R8	5.25
6DK3/6DL3	5.05	6FH5	3.70	6HS5/6HV5A	8.95	6KU8	2.75	6RA6	11.15
6DK6	3.40	6FH8	12.50	6HS6	12.00	6KV6A	41.20	6RA9	11.15
6DL4/EC88	6.00	6FJ7	3.15	6HU6/EM87	3.70	6KV8	Call	6RP10	6.30
6DL5/EL95	6.20	6FM7	4.10	6HU8/ELL80	36.75	6KX8/ECC808	Call	6RP15	Call
6DN7	5.05	6FM8	2.75	6HW8	5.60	6KY8A	7.15	6RP22	3.70
6DQ3/6DT3	10.10	6FQ5A/6GK5	6.75	6HZ5/6JD5	5.35	6KZ8	4.10	6S2-A/EY87	2.75
6DQ3A/6DU3	8.95	6FS5	3.50	6HZ6	3.15	6L4	8.20	6S4A	3.80
6DQ4	3.70	6FV6	2.75	6HZ8	2.75	6L5G	4.35	6S7	3.25
6DQ5	11.80	6FW5	3.40	6J4	2.75	6L6	18.80	6S7G	3.70
6DQ6A-B/6GW6	7.50	6FW8	4.45	6J5	4.75	6L6G	28.35	6S8GT	2.75
6DR4	Call	6FY5/EC97	5.25	6J5GT	5.60	6L6GA	Call	6SA7	2.95
6DR7	5.05	6FY7	5.25	6J6A/ECC91	3.15	6L6GB	Call	6SA7GT	2.75
6DR8/EBF83	2.75	6G5/6U5	31.50	6J7/EF36	4.55	6L6GC (US)	26.20	6SB7-Y	4.10
6DS5	2.75	6G6G	5.45	6J7G	4.65	6L6GC (RCA black plate)	Call	6SC7	6.20
6DS8/ECH83	4.45	6G8G	2.85	6J7GT	4.35	6L6GC (Svetlana)	14.95	6SC7GT	6.10
6DT4	Call	6G11	4.45	6J8G	8.40	6L6WXT (Sovtek)	9.90	6SD7GT	4.10
6DT5	3.15	6GA7	10.20	6J9	2.75	6L7	3.50	6SF5	3.70
6DT6A	3.05	6GB3A	6.85	6J10/6Z10	7.50	6L7G	3.90	6SF5GT	4.00
6DT8	Call	6GB5-A/EL500	5.80	6J11	4.35	6LB6	25.20	6SF7	4.45
6DV4	9.55	6GB6	9.80	6JA5	17.55	6LC8	Call	6SG7	4.85
6DW5	4.55	6GB7	7.35	6JB6-A	25.00	6LD20	8.40	6SG7GT	4.20
6DX8/ECL84	4.20	6GC5	3.30	6JC6A	5.35	6LE8	5.45	6SH7	3.25
6DY5/EL82	4.55	6GD7	4.55	6JC8	2.75	6LF6/6MH6	Call	6SH7GT	Call
6DZ7	Call	6GE5	7.15	6JD6	4.75	6LF8	7.50	6SJ7	4.00
6E5	17.00	6GE8/7734	28.35	6JE6A	45.40	6LH6A/6LJ6	Call	6SJ7GT	8.50
6E6	6.75	6GF5	Call	6JE6C/6LQ6	45.00	6LJ8	5.70	6SK7	4.20
6E7	7.35	6GF7A	6.65	6JE8	2.85	6LM8	Call	6SK7GT	4.00
6EA4/6EH4A	5.25	6GH8A	3.40	6JF6	8.95	6LQ8	4.45	6SL7GT	7.35
6EA5/6EV5	7.25	6GJ5A	Call	6JG5	4.00	6LR6	36.75	6SL7GT (Sovtek)	4.95
6EA7/6EM7	6.10	6GJ7/ECF801	4.65	6JG6A	36.45	6LR8	6.30	6SL7WGT	7.90

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE		
6J7GT-B	7.90	7ES8	4.20	9EA8	2.75	12AB5	4.10	12BQ6GTA-B	2.75		
6SN7GT (Russia)	6.20	7EY6	2.95	9ED4/PD500	4.10	12AC5/UF41	6.10	12BR3/12RK19	2.75		
6SN7GT (Sovtek)	5.95	7F7	9.00	9GH8A	4.20	12AC6	2.75	12BR7	6.55		
6SQ7	4.20	7F8	8.00	9GV8	2.75	12AC10A	6.65	12BS3-A	3.70		
6SQ7GT	3.80	7G7/1232	4.85	9JW8/PCF802	4.00	12AD6/12AG6	2.75	12BT3	Call		
6SR7	3.80	7G8	3.70	9KC6	2.75	12AD7	13.65	12BT6	3.40		
6SS7	4.45	7GS7	4.85	9KZ8	2.75	12AE6A	2.95	12BV7/12BY7A	10.20		
6SS7GT	4.35	7GV7	4.55	9LA6	2.75	12AE7	4.00	12BV11	5.70		
6ST7	2.75	7H7	4.35	9MHH3	6.85	12AE10	6.10	12BZ6	11.55		
6SU7GTY/6188	5.45	7HG8/8HG8	3.90	9ML8	8.20	12AF3	2.75	12BZ7	5.00		
6SV7	3.40	7J7/7S7	3.90	9MN8	7.25	12AF6	3.25	12C5/12CU5	3.40		
6SZ7	2.95	7K7	7.05	9MP12	2.75	12AH7GT	2.75	12C8	2.85		
6T4	2.75	7KY6/9KX6	6.10	9RA6	Call	12AH8	8.60	12C8GT	3.15		
6T7G	5.05	7L7	3.05	9RAL1	4.10	12AJ6	Call	12CA5/12EH5	2.75		
6T8-A	2.75	7MP18	2.75	9RHR2	2.75	12AJ7/HCH81	3.50	12CG7	3.15		
6T9	2.75	7N7	8.00	9V9/PCL200	4.55	12AL5	4.00	12CK3/12CL3	3.50		
6T10	6.00	7Q7	3.15	10	78.75	12AL8	2.75	12CN5	2.75		
6U3/EY80	3.15	7R7	4.00	10AL11	2.75	12AL11	4.20	12CR6	2.95		
6U4GT	3.05	7T7	3.90	10BQ5	Call	12AQ5	2.75	12CS6	2.75		
6U6GT	3.05	7V7/1231	3.90	10C8	2.75	12AS5	3.15	12CT8	3.15		
6U7G	2.85	7W7	2.95	10CW5/LL86	3.25	12AT6/HBC90	2.95	12CX6	Call		
6U9/ECF201	2.75	7X6	2.95	10DA7	3.50	12AT7/ECC81	Call	12D4/12DM4	Call		
6U10	5.80	7X7/XXFM	3.80	10DE7	4.20	12AT7 (RCA)	Call	12DA6/UF89	5.60		
6V3-A	2.75	7Y4	2.75	10DX8/LCL84	3.70	12AT7WC	7.90	12DB5	2.75		
6V4/EZ80	Call	7Z4	2.75	10E	5.25	12AU6	3.25	12DE8	2.75		
6V6	14.20	8A8/9A8/9U8	2.75	10EB8/10GN8	5.15	12AU7A/ECC82	6.20	12DF7/12DT7	5.80		
6V6G	16.80	8AC9	2.75	10EG7	3.05	12AU7A (RCA)	Call	12DK6	3.15		
6V6GT	12.50	8AC10	5.15	10EM7	2.75	12AV5GA	2.75	12DK7	2.75		
6V7G	Call	8AL9	6.30	10EW7	4.10	12AV6	3.80	12DL8	3.05		
6V8	2.75	8AR11	7.25	10F1	8.40	12AV7	5.05	12DQ4	5.15		
6V9	2.75	8AU8A/8BA8A	2.75	10F18	8.40	12AW6	2.75	12DQ6-A	7.90		
6W4GT	2.85	8AV11	4.55	10GF7A	7.35	12AX3	2.85	12DQ6B/12GW6	10.40		
6W7G	2.75	8AW8A	7.15	10GK6	5.90	12AX4GTA	2.75	12DQ7	4.75		
6X2/EY51	4.10	8B10	4.55	10GV8/LCL85	3.50	12AX4GTB	2.75	12DS7	Call		
6X4/EZ90	4.75	8BA11	6.85	10HF8	3.15	MULLARD ECC83/12AX7  Just arrived! Mullard ECC83 (12AX7) tubes, 1970's production. While supply lasts. \$60.00				12DT5	2.75
6X5G	Call	8BH8	5.45	10JA5	6.95					12DT8	6.10
6X5GT/EZ35	4.35	8BM11	4.55	10JA8	3.50					12DV7	2.95
6X8-A	4.45	8BN8	2.75	10JT8/10LY8	6.10					12DV8	4.10
6X9/ECF200	4.75	8BN11	5.05	10JY8/10LZ8	4.85					12DW4A	2.75
6Y5	7.90	8BQ5	2.75	10KR8/10LB8	6.30					12DW7/7247	19.50
6Y6G	Call	8BQ11	5.80	10KU8	3.05					12DW8	2.75
6Y6GA	Call	8BU11	7.70	10LD6	7.70					12DY8	Call
6Y6GT	3.60	8CB11	5.45	10LE8	2.75					12DZ6	2.75
6Y7G	4.35	8CG7/8FQ7	3.80	10LT8/10LW8	6.30					12EA6/12EK6	Call
6Y9/EFL200	3.50	8CM7	2.75	10T10	5.60					12EC8	2.75
6Z4/84	7.35	8CN7	2.75	10Y (ST)	78.75					12ED5	Call
6Z5/12Z5	4.85	8CS7	3.05	10Z10	6.95					12EG6	Call
6Z7G	6.55	8CW5-A/XL86	3.50	11AF9	9.45	12EL6	2.75				
6ZY5G	4.45	8CX8	2.75	11AR11	4.75	12EM6	Call				
7A4/XXL	5.45	8D2	8.00	11BM8	6.00	12EN6	Call				
7A5	3.70	8EB8/8GN8	3.05	11BQ11	5.05	12EQ7	2.75				
7A6	3.15	8EM5	2.75	11BT11	8.00	12EZ6	Call				
7A7	3.90	8ET7	3.50	11CA11	7.25	12F5GT	Call				
7A8	2.85	8GJ7/PCF801	4.10	11CF11	10.00	12AX7 (JJ Electronics)	7.75				
7AD7	Call	8GU7	Call	11CH11	8.20	12AX7LPS (Sovtek)	9.00				
7AF7	11.65	8HG8/PCF86	3.90	11CY7	3.90	12AX7WXT (Sovtek)	7.75				
7AG7/7AH7	4.55	8JU8A	2.95	11DS5	6.65	12AY3A	3.05				
7AJ7	3.40	8JV8	4.75	11E3	2.75	12AY7	9.00				
7AK7	5.05	8KA8	3.05	11FY7	8.20	12AZ7A	5.05				
7AN7/PCC84	3.70	8KR8	4.75	11HM7	5.80	12B4A	4.10				
7AU7	2.75	8LC8	2.75	11JE8	2.75	12B7/14A7	4.20				
7B4	2.95	8LS6	4.00	11KV8	Call	12B8GT	9.55				
7B5	3.15	8LT8	4.20	11LQ8	Call	12BA6/HF93	4.00				
7B6	4.00	8SN7GTB	3.40	11LT8	3.15	12BA7	2.75				
7B7	8.50	8U9	3.70	11LY6	11.55	12BB14	3.70				
7B8	3.15	8X9	3.70	11MS8	5.80	12BD6	2.75				
7C4/1203A	3.40	9AH9	7.50	11R3	2.75	12BE3	3.15				
7C5	8.30	9AK8/PABC80	2.75	11Y9/LFL200	3.25	12BE6/HK90	4.35				
7C6	8.95	9AK10	Call	12A (ST)	30.45	12BF6/12BU6	2.75				
7C7	3.70	9AM10	5.45	12A5	3.90	12BF11	7.90				
7D4	5.15	9AQ8/PCC85	4.10	12A6	2.75	12BH7A	15.75				
7DJ8/PCC88	Call	9AU7	2.75	12A6GT	2.75	12BK5	Call				
7E6	2.95	9BJ11	4.20	12A7	5.90	12BL6	2.75				
7E7	2.75	9BR7	2.75	12A8G	2.95	12BN6	2.95				
7EK7/7FC7	2.75	9CL8	2.75	12A8GT	2.75	12BQ6GA	Call				

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
12J5GT	2.75	14GW8/PCL86	3.90	17JN6	5.90	22JR6	6.30	31AL10	5.00
12J7GT	2.85	14H7	3.15	17JQ6-A	9.55	22JU6	7.35	31JS6C	16.00
12J8	2.75	14J7	3.15	17JT6A	3.80	22KV6A	6.95	31LQ6	Call
12JB6A	17.00	14K7	4.10	17JZ8	7.50	23Z9	6.85	31LR8	7.25
12JF5	16.20	14L7/UBC41	4.55	17KV6A	8.40	24A	10.70	32	5.45
12JN6-A	3.40	14N7	2.85	17KW6/PL506	9.00	24BF11	3.70	32ET5A	2.75
12JN8	2.75	14Q7	3.15	17L6GT	Call	24JE6A	Call	32HQ7	4.45
12JQ6	Call	14R7	3.15	17LD8	8.20	24JE6C/24LQ6	21.00	32L7GT	4.20
12JT6A	5.15	14S7	3.15	17R5	Call	24JZ8	4.45	33	5.45
12JZ8	7.25	14W7	4.00	17W6GT	2.75	25A6	3.99	33GT7	4.55
12K5	3.15	14X7	3.15	17Y9	8.95	25A6GT	3.80	33GY7A	10.20
12K7G	4.45	14Y4	Call	17Z3/PY81	2.75	25A6G	3.80	33JR6	6.85
12K7GT	3.50	15	18.60	18	7.70	25A7G	7.70	33JV6	4.65
12K8	2.85	15A6/PL83	3.15	18A5	2.75	25A7GT	5.05	34	3.80
12K8GT	2.85	15AF11A	Call	18AJ10	2.75	25AC5GT	4.00	34CD3/34CE3	3.40
12KL8	2.75	15BD11A	6.00	18FW6A	2.75	25AV5GA	Call	34DK3	7.60
12L6GT	2.75	15CW5/PL84	4.65	18FX6A	2.75	25AX4GT	3.40	34GD5A	2.75
12L8GT	Call	15DQ8/PCL84	4.20	18FY6-A	2.75	25B8GT	16.70	34R3	2.75
12MD8	5.70	15E	11.55	18GB5	Call	25BB14	3.70	35-51	5.15
12Q7G	3.05	15EW6	4.20	18GD6A	2.75	25BK5	2.75	35A3	8.40
12Q7GT	3.05	15EW7	3.15	18GV8/PCL85	6.55	25B6GT	3.25	35A5	4.75
12R5	2.75	15FY7	Call	18RAL1	2.75	25BR3/U329	4.55	35B5	2.75
12S7/W142	4.10	15HB6	Call	19	5.90	25C5	5.25	35C5	3.05
12S8GT	2.75	15KY8A/17DL8	Call	19AQ5	5.70	25CU6	Call	35DZ8	Call
12SA7	5.35	15LE8	2.75	19AU4GTA	Call	25C6G	3.70	35EH5	Call
12SA7GT	3.90	15MF8	7.50	19BG6G-GA	Call	25CA5	4.00	35GL6	4.00
12SC7	2.75	15MX8	8.00	19BR5	4.75	25CD6GB	6.30	35HB8	2.75
12SF5	3.40	15R	18.20	19BY7/UF85	6.85	25CG3	6.65	35L6GT	4.75
12SF5GT	3.40	16A5/PL82	5.45	19C8	2.75	25CK3	3.50	35LR6	18.60
12SF7	4.75	16A8/PCL82	7.50	19CG3	5.05	25CT3	Call	35T	87.40
12SG7	4.75	16AK9	8.00	19CL8A/19JN8	3.15	25DK3	3.50	35TG	Call
12SH7	Call	16AQ3/XY88	4.10	19D8/UCH81	3.05	25DK4	2.75	35W4	3.40
12SJ7	3.15	16BQ11	2.75	19DE3	4.35	25DL3	8.20	35X4	2.75
12SJ7GT	3.15	16BX11	2.75	19DK3	5.15	25DN6	3.40	35Y4	3.40
12SK7	4.20	16CB28	6.85	19DQ3	Call	25DQ6A	2.95	35Z3	4.10
12SK7GT	4.45	16GK6	2.75	19EZ8	3.15	25E5/PL36	Call	35Z4GT	3.15
12SL7GT	4.00	16GY5	3.50	19FL8/UBF89	4.85	25EC6	Call	35Z5GT	Call
12SN7GT-A-B	3.40	16KA6	Call	19FX5	4.55	25EH5	2.95	35Z6G	6.20
12SQ7	6.30	16LU8A	Call	19GQ7	2.75	25F5	2.75	36	6.10
12SQ7GT	5.60	16Y9	8.20	19HR6	2.75	25HX5	6.65	36AM3B	2.75
12SR7/12SW7	3.70	17A8/19EA8A	2.75	19HS6	Call	25JZ8	7.70	36KD6/40KD6	23.55
12SR7GT	4.65	17AB9	3.05	19HV8	5.45	25L6GT/25W6	5.25	36LW6	13.55
12SY7	6.10	17AB10/17X10	5.35	19J6	2.75	25N6G	Call	36MC6	17.65
12T10	7.70	17AV5GA	4.45	19KG8	2.75	25T/HK-24	52.20	37	5.70
12U7	4.35	17AX3	2.75	19MR9	3.15	25W4GT	2.75	38	4.10
12V6GT	4.10	17AX4GTA	2.75	19Q9	2.75	25Y5	3.40	38A3/UY85	3.15
12W6GT	3.40	17AY3/17BS3A	3.50	19T8	6.10	25Z5	3.70	38HE7/38HK7	8.85
12X4	2.75	17BB14	Call	19V8	3.80	25Z6GT	3.80	39-44	3.15
12Z3	2.75	17BE3/17BZ3	4.10	19X3	4.55	26 (ST)	16.10	40KG6A/PL519	14.70
13CW4	18.60	17BF11	6.95	19X8	2.75	26A6	5.05	41 (ST)	12.60
13DE7	2.75	17BH3	4.55	19Y3/PY82	Call	26A7GT	7.60	42 (ST)	18.10
13DR7	4.45	17BQ6GTB	3.70	20AQ3/LY88	3.90	26AQ8/UCC85	3.80	42EC4-A	7.05
13EM7/15EA7	Call	17BR3/17RK19	5.70	20EZ7	3.15	26C6	Call	42KN6	8.40
13FD7	3.15	17BW3	5.45	20LF6	Call	26D6	5.45	43	6.10
13FM7/15FM7	4.10	17C5/17CU5	2.75	20X672	8.40	26FZ6	5.50	45	78.75
13GB5/XL500	4.10	17C8/UBF80	3.15	21A6/21B6	5.80	26HU5	19.55	45 SPECIAL	Call
13GF7A	8.10	17C9	6.85	21EX6	4.10	26LW6	19.85	45A5/UL41	Call
13J10/13Z10	7.35	17CK3	4.10	21GY5	5.05	26LX6	16.20	45B5/UL84	3.90
13JZ8-A	5.05	17CT3	4.75	21HB5A	12.20	26Z5W	7.60	45Z3	2.75
13V10	3.15	17D4A/17DM4A	2.75	21HJ5	Call	27 (ST)	8.95	45Z5GT	3.90
14A4	Call	17DE4	2.75	21JS6A/23JS6	Call	27BL8/UCF80	4.55	46 (ST)	19.85
14A5	Call	17DE5	2.75	21JV6	3.15	27GB5/PL500	5.90	47 (ST)	17.55
14AF7/XXD	5.35	17DQ6B/17GW6	6.00	21JZ6	7.05	28D7-W	5.70	48	15.75
14B6	5.15	17DW4A	Call	21KA6	12.80	29GK6	2.75	49	11.55
14B8	2.95	17EW8/HCC85	2.75	21KE6	4.55	29KQ6	10.70	50 (ST)	Call
14BL11	5.90	17GE5	4.10	21KQ6	6.30	29LE6	11.35	50A1/D5TF30	Call
14BR11	6.20	17GJ5-A	5.45	21LG6A	7.90	30A5/HL94	7.50	50A1TR (solid state)*	15.00
14C5	3.25	17GT5A	5.25	21LR8	7.90	30AE3/PY88	6.10	50A5	3.15
14C7	3.15	17GV5	Call	21LU8	8.20	30AG11	3.70	50B5	2.75
14E6	5.60	17H3	2.75	22	9.00	30JZ6	14.10	50BM8/UCL82	2.75
14E7	4.00	17JB6A	9.45	22BH3A	2.75	30KD6	27.20	50C5	3.40
14F7	Call	17JF6	7.25	22BW3	5.25	30MB6	Call	50C6G	3.80
14F8	4.20	17JG6-A	6.55	22DE4	5.70	30S	Call		
14G6/UBC81	3.70	17JK8	2.75	22JF6/22KM6	8.85	31	Call	*50A1TR is a solid state replacement for the 50A1	
14GT8/14JG8	2.75	17JM6	9.35	22JG6A	8.95	31A3/UY41	7.25		

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
D6G	Call	274A (WE)	Call	572B (Svetlana)	69.95	902-A	Call	5608A	27.20
DC4	2.85	275A (WE)	Call	572B (China)	52.90	917	21.75	5610	5.45
50EH5	4.55	282A (WE)	Call	574AX/6281	9.00	918/CE-1C	20.90	5618	3.95
50FA5/50FK5	2.75	297A (WE)	Call	579B	31.50	919	22.70	5635	3.40
50FE5	3.15	300B (WE)	Call	604/7014	119.00	920	14.50	5636	7.25
50FY8	3.15	300B (Svetlana)	149.00	623	91.25	921	5.45	5637	7.25
50GY7	Call	300B (Sovtek)	79.00	627	102.00	923	18.20	5641	10.40
50HC6	3.15	300B (Cetron)	250.00	631P1/SN4	34.00	925	18.20	5642	7.25
50HK6	3.15	300B (China)	89.00	635/7019	59.00	926	18.20	5643	10.40
50HN5	8.20	300B (Nickel Anode China)	69.00	672A	78.75	927/CE25C-D	21.20	5644	18.20
50JY6	4.55	310A-B (WE)	52.20	703A	18.20	928	Call	5647	15.45
50L6GT	6.10	310A (Cetron)	Call	704A	17.00	929	13.15	5651A	3.05
50X6	3.40	311A-B (WE)	37.20	705A	11.65	930	8.20	5653	12.70
50Y6GT	2.75	313C-CA	4.55	705A (WE)	11.65	931A-B	37.40	5654/6AK5W	3.40
50Y7GT	3.70	316A	36.90	709A	19.55	932/1229	4.55	5656	13.65
52	34.00	323A-B	9.00	710/6011	Call	934	29.95	5659	2.75
53	8.20	327A	17.00	713A	5.25	935	93.00	5660	2.75
53HK7	Call	328A (WE)	39.20	714/7021	45.60	950 (ST)	17.35	5661	4.45
55	4.85	329A (WE)	Call	715A-B-C	68.00	954	6.20	5662	4.55
56	Call	337A (WE)	Call	716/6855	58.60	955	4.55	5663	2.85
57	4.35	338A (WE)	9.00	717A	18.20	956	8.20	5670/2C51W	6.95
58	Call	348A (WE)	Call	719A	4.75	957	6.20	5672/DL69	5.05
58HE7	10.20	350A (WE)	Call	724B	16.40	958	7.25	5675	36.35
59	Call	350B (WE)	Call	726A-B-C	10.00	959	8.20	5676	6.85
60FX5	3.15	352A (WE)	42.55	734/5544	116.00	991	2.75	5678	2.75
60HL5	3.80	353A (WE)	7.90	734L	79.40	1005	13.00	5679	8.20
61BT	10.20	354A (WE)	Call	760/6858	119.00	1006	20.90	5686	8.20
65	4.55	359-A	25.20	760L/7023	Call	1007	2.75	5687	3.70
70L7GT	4.35	375A (WE)	Call	800	Call	1026	17.00	5690	68.60
71A (ST)	34.00	376C (WE)	9.00	801-A	97.75	1054	6.85	5691 (red base)	Call
72	3.70	377A (WE)	15.75	802	10.95	1217	2.75	5691 (black/brown base)	Call
73	5.45	381A (WE)	18.20	803	27.20	1222A	11.25	5692 (red base)	Call
75 (ST)	14.00	384A	9.00	804	17.00	1236	18.40	5692 (black/brown base)	Call
75C1	10.20	386A	9.00	805/331A	90.75	1273	Call	5693	14.50
75TL	Call	388A	10.40	807	14.60	1603	73.75	5696-A	3.70
76 (ST)	13.15	394A	18.20	809	39.20	1609	7.25	5702	11.00
77	3.50	395A	13.65	811-3 (Svetlana)	29.00	1612	4.35	5703	7.25
78	5.15	396A/2C51	5.45	811-3A (Svetlana)	29.00	1613	Call	5704	8.20
79	3.80	398A (WE)	Call	811-10 (Svetlana)	29.00	1614	27.40	5718-A/EC70	7.70
80 (ST)	20.40	399A-B	10.95	811A (US)	39.70	1616	7.25	5719	10.40
80 (tubular)	11.35	400A-B	10.95	811A (Svetlana)	21.95	1619	8.20	5721/QK209	78.25
81 (ST)	14.60	403A (WE)	11.35	811A (Russia)	20.40	1620	10.00	5722	12.60
82 (ST)	13.80	407A	Call	811A (China)	13.65	1621	8.30	5725/6AS6W	3.05
83	21.50	409A	5.70	812-A (US)	53.55	1622	15.75	5726/6AL5W	2.75
83V	Call	412A (WE)	Call	812A (Svetlana)	35.00	1624	Call	5727	2.75
84M	7.90	412A/6754	8.20	812A (China)	27.00	1625	4.55	5744/6151	10.00
85	3.80	413B	22.70	813	Call	1626	3.70	5749/6BA6W	3.15
85AS	11.35	415A	4.10	813 (China)	29.00	1629	6.00	5750/6BE6W	3.15
89Y	3.80	416B/6280	17.00	814	22.70	1631	11.25	5750-S	39.20
90C1	5.70	416D	23.10	815	13.65	1632	3.90	5751	10.30
95A1	5.45	417A (WE)	Call	816	21.75	1633	4.55	5755/520A	8.50
101L (WE)	Call	418A	Call	826	39.10	1635	4.55	5763	10.95
117L7	5.45	420A (WE)	Call	828	68.00	1639	4.20	5767	62.40
117N7GT	5.90	421A (WE)	Call	829B/3E29	15.90	1641/RK60	8.20	5768	3.40
117P7GT	4.85	422A (WE)	184.00	830B	Call	1654	10.20	5783	7.25
117Z3	4.75	423A-B	7.25	832A	7.25	2022	Call	5784	4.55
117Z4GT	3.80	423C	8.20	836	23.75	2033	5.35	5785	4.55
117Z6GT	5.45	426A	7.25	837	7.25	2050A (tubular)	Call	5787	Call
124A	34.00	427A	4.55	838	Call	2050 (ST)	16.00	5796	34.00
150B2	6.85	432B (WE)	5.25	841	26.70	2050W	16.00	5798	5.25
150B3	5.70	443A (WE)	6.85	843	33.50	2051	10.50	5814A	3.40
150C4	2.75	446A	6.85	845	Call	3533	8.20	5823/Z900T	26.05
171-A	Call	481B	54.40	845 (China)	39.00	4043	32.55	5824	16.40
211/VT-4C	174.00	484	45.40	864	31.50	4046-A	34.00	5829	11.80
213A	27.20	485 (ST)	11.55	865	18.20	4687A	9.00	5834	45.40
221A	18.20	502A	11.80	866A	18.60	5516	13.65	5837	148.00
222	21.00	512AX	10.95	866AX	18.20	5517	13.65	5839	6.85
224	Call	518AX	10.20	866JR	Call	5550/GL415	Call	5840/6225	10.95
227	Call	526AX	8.20	868/PJ23	16.40	5557/FG-17	Call	5841	4.55
230	Call	527AX	8.20	872-A	54.40	5559/FG-57	45.40	5842/417A	11.35
246	63.00	533AX	9.00	874 (ST)	8.20	5560/FG-95	68.00	5844	6.20
249B	Call	534AX	9.00	876	22.70	5581	16.40	5845	4.55
256	Call	543	13.00	878A	13.65	5582	31.75	5847/404A	19.55
262A-B (WE)	Call	547DX	9.65	884	8.20	5590/401A	3.15	5851	11.35
272A (WE)	120.00	572B/160L (US)	Call	885	5.45	5591/403B	10.40	5854	2.75

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
5861/EC55	90.75	6140	8.40	6681/12AX7A	14.30	7355	17.35	8223/E288CC	
5869/9950	69.75	6145	9.00	6686/E81L	7.25	7360	46.75	8233/E55L	37.25
5870L	22.50	6146-A	18.90	6687/E91H	7.25	7370	8.20	8353	8.20
5876A	22.70	6146B/8298A	28.90	6688/E180F (gold pins)	10.85	7377/QQE04-5	54.40	8380	Call
5877	73.75	6146B (China)	15.00	6688/E180F	8.20	7410	14.50	8393	13.65
5879	9.00	6146W/7212	20.90	6689/E83F	11.55	7427	2.75	8408	Call
5881/6L6WGB	26.25	6153	13.65	6760	8.40	7462	26.05	8416	13.65
5881 (Sovtek)	8.25	6155	95.25	6761	9.00	7475	2.75	8417	55.00
5881WXT (Sovtek)	10.50	6161	32.55	6771	73.75	7534/E130L	39.10	8422/5991	29.00
5886	73.10	6173	28.35	6777	79.40	7536	2.75	8423	22.70
5889	45.40	6186/6AG5WA	5.35	6788	2.75	7543/E130LF	4.10	8426	4.55
5894/AX9903	58.60	6189/12AU7WA	5.80	6802	14.50	7548	31.75	8445	2.75
5895	34.00	6197	3.70	6807	128.00	7550	6.85	8458/YL1240	39.20
5896	7.25	6201/12AT7WA	8.00	6814	Call	7551	8.20	8463	18.20
5899	Call	6202/6X4WA	4.10	6816	56.70	7554	49.90	8502	11.35
5902	7.25	6203	9.00	6829	10.95	7558	9.00	8532	5.70
5903	4.55	6205	4.55	6832	6.85	7581A/KT66	27.55	8556/EC8010	19.85
5905	15.75	6206	13.65	6842	31.75	7586	31.75	8560A	Call
5906	8.20	6211A	3.70	6844A	29.00	7587	37.40	8560AS	Call
5907/6056	5.70	6213	8.00	6850	31.75	7591A	Call	8560AS (Svetlana)	120.00
5915	4.10	6216	6.30	6872	11.35	7643/E80CF	26.70	8577	25.00
5916	3.40	6227/E80L	40.90	6883B/8552	Call	7687	8.20	8595	39.70
5920/E90CC	8.20	6247	12.30	6888	Call	7693	10.95	8596	59.00
5931/5U4WG	25.20	6252	45.60	6907	71.75	7695	4.20	8608	27.20
5932	28.35	6263A	39.70	6909	13.65	7698	22.70	8627	26.05
5933/807W	15.05	6265	5.80	6910	18.20	7699	18.20	8643	124.00
5947	9.00	6267/EF86	35.00	6919	4.55	7701	Call	8906	79.40
5962	2.75	6267 (Svetlana)	13.95	6922/E88CC	8.95	7710/Z70U	28.35	8950	Call
5963/12AU7A	4.75	6267 (Russia)	17.00	6922/6N1P (Svetlana)	4.75	7711	11.35	8964	56.70
5964	2.95	6286	3.70	6922 (Sovtek)	8.50	7716	4.10	8965	22.70
5965-A	2.75	6293	22.70	6923/EA52	54.40	7717	3.70	9001	5.45
5972	4.55	6299	204.00	6931	2.75	7719	13.65	9002	5.45
5979	45.60	6308	3.70	6939	29.00	7722/E280F	16.40	9003	5.45
5987/SC968B	14.70	6328	45.40	6945	3.70	7724	3.40	9004	5.45
5992 (Bendix)	Call	6336-A-B	56.20	6948	17.00	7731	4.10	9005	10.00
5993	5.45	6350	Call	6957	9.00	7732	4.10	9006	3.15
5998	Call	6352	10.20	6973	29.95	7737/E186F	Call	18046	6.85
5998A	18.90	6354	11.35	6977/DM160	11.80	7738	9.00	A1714	4.55
6004/U50	3.05	6360-A	8.95	7009	63.50	7751/E235L	33.60	A2134	6.85
6005/6AQ5W	4.85	6360-A (Telefunken)	Call	7025/12AX7A	22.00	7768	102.00	A2293	13.00
6012	79.40	6374/EY84	10.95	7025B/12AX7WB (Sovtek)	6.50	7788/E810F	32.05	ABL1	10.50
6021	4.75	6384	Call	7027-A	52.50	7801	567.00	AC701	263.00
6028/408A	2.75	6386	Call	7036	6.95	7861	Call	AH221/CV5	4.55
6029/573AX	Call	6397	Call	7044	8.20	7867	18.10	ARP19	2.75
6045	10.00	6414	10.00	7054/8077	Call	7868	37.50	AZ41	9.20
6050	6.85	6417	6.30	7055	Call	7894	23.10	BH	18.60
6060/ECC801	10.20	6418/548DX	10.95	7056	5.70	7895	11.55	BR	14.85
6062/M8096	8.20	6438/1038	8.00	7057	4.55	7898	7.60	C1A	78.75
6064	4.10	6442	54.40	7058	5.70	7905	Call	C1B-A/5664	22.70
6065	5.45	6476A	36.35	7059	4.55	7963	3.40	C1K/6014	97.75
6072-A	13.65	6483	8.00	7060	Call	7983	31.75	C3J/5632	Call
6073	4.10	6485/6AH6WA	3.90	7061	3.80	7984	Call	C3J/5632	23.10
6074	4.55	6489/EA76	9.00	7062/E180CC	8.20	8005	137.00	C3JA/5684	Call
6080	8.20	6519	6.85	7077	73.75	8008	43.60	C3M	2.75
6080WC	9.45	6528-A	68.00	7094	Call	8012-A	25.20	C6J-K/5685	85.05
6082-A	13.35	6533	13.65	7117	28.35	8013-A	31.75	C6J/5C21	40.90
6083/AX9909	184.00	6542	31.75	7119/E182CC	13.15	8020/451	56.10	C6J-KF	85.05
6084/E80F	29.40	6550-A (US)	41.50	7153	22.70	8035	22.70	CAA-322	37.80
6085/E80CC	46.55	6550C (Svetlana)	27.95	7167	3.70	8042/4652	10.95	CK1114	5.70
6086	9.00	6550WD (Sovtek)	14.75	7189-A	Call	8049	13.65	CK1121	17.00
6087/5Y3WGTB	11.35	6550WE (Sovtek)	16.50	7199	27.20	8056	21.75	CT854	11.55
6095	Call	6611	5.25	7199 (Sovtek)	16.50	8058	40.90	CV2486	18.90
6098/6AR6WA	Call	6612	3.70	7233	10.70	8068	54.60	CV4055/6132	5.70
6099	4.10	6626/0A2WA	3.50	7235	125.00	8070	Call	DA2120	15.65
6100/6C4WA	3.40	6627/0B2WA	3.50	7236	39.10	8071	4.55	DAC32	10.50
6101/6J6WA	2.95	6628	4.55	7239	49.90	8072	147.00	DAF40	8.40
6106/5Y3WGT	6.85	6661/6BH6	6.65	7244	Call	8084	Call	DAF41	6.85
6110	8.20	6663/6AL5	2.95	7258	3.70	8100	2.75	DC90	8.10
6111	Call	6664/6AB4	Call	7289/2C39A	36.35	8102	2.75	DC96	3.15
6112	Call	6669/6AQ5A	3.40	7296	173.00	8103	6.20	DF64	Call
6115A	284.00	6676/6CB6A	Call	7308/E188CC	Call	8106	12.30	DG7-32	89.25
6118	4.00	6677/6CL6	3.15	7308 (gold pins)	Call	8113/6CY5	47.25	DG10F	2.85
6134/6AC7WA	8.40	6678/6U8A	4.55	7320/E84L	17.00	8121	86.25	DL41	Call
6136/6AU6WA	3.70	6679/12AT7	8.00	7323	5.70	8156	18.20	DL64	2.75
6137/6SK7WA	5.25	6680/12AU7A	Call	7327	9.00	8223/E288C (gold pins)	36.75	DR2000	13.65

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
DR2010	15.65	EF40	5.70	GV3A-1400	17.00	NS1	3.40	UF42	10.50
DR2020	10.95	EF42	5.90	GV3A-2500	17.00	ORP60	8.40	UF43	10.50
DR2100	15.65	EF43	12.60	GV3AB-1500	17.00	ORP90	8.40	UF80	2.75
DR2110	Call	EF50	3.40	GV5A-2000	17.00	PC93/77A90	Call	UF86	25.20
DR2115	6.85	EF800	3.50	GV5A-1600	17.00	PC96	8.40	UM11	15.75
DR2120	7.70	EF804	47.25	GY501	10.50	PC97	Call	UM80	Call
DR2200	10.00	EF805S	7.90	GY802	5.25	PCF800-30C15	10.50	UM81	15.75
DR2210	10.95	EFP60	10.95	GZ37	56.70	PCF808	5.25	UM85	31.50
E34L (Tesla)	13.60	EL3C-L	45.40	HCH81/12AJ8	10.50	PCL81	9.00	UY82	10.50
E34LS	11.90	EL6C	56.70	HL23/VR130	5.45	PCL800-30PL13	10.50	UY92	10.50
E34LSB	14.90	EL12N	13.65	HY31Z	Call	PL95	10.50	V199	85.05
E92CC	9.45	EL32/CV1052	Call	HY69	Call	PL504	Call	V201A	Call
E1148	3.40	EL34 (Svetlana)	14.95	HY75	17.00	PM84	10.50	VI103-EM35	Call
EA53	86.25	EL34WXT (Sovtek)	8.95	HY615	11.55	PY800	2.75	VP41	10.50
EAF801	8.70	EL37	125.00	KT66 (GEC)	Call	PY801	2.75	VR53	6.30
EB41	4.55	EL42	10.50	KT88 (GEC)	Call	QQE03-20	12.60	VR65	5.45
EBC11	8.40	EL183	10.50	KT88 (Tesla)	39.00	R145	10.50	VR135	10.50
EBC33	7.60	EL360	Call	KT88 (Penta)	18.50	RK61	12.20	VU71	Call
EBC90	5.25	EL508	21.00	KT88 (Sovtek)	19.95	SP2	13.65	VU111S	10.50
EBL21	9.45	EL509 (Svetlana)	32.00	KT90	Call	SP2H	6.85	VX64	7.35
EC52/VR137	5.45	EL802	15.75	KTW61	7.35	STV85-10	6.30	W101	2.75
EC54/CV66	4.10	EL803	4.75	M-2057	Call	SV572-3 (Svetlana)	56.00	WD-11	Call
EC903	8.50	EL803S	10.50	M8082	10.50	SV572-10 (Svetlana)	56.00	X66/CV1099	4.10
ECC40	12.00	EL805	7.25	M8083	5.05	SV572-30 (Svetlana)	56.00	X101	6.30
ECC803S (Tesla)	25.00	EL822	10.95	MC1400	8.00	SV572-160 (Svetlana)	56.00	X199	63.00
ECC804	8.40	EM71	15.90	MHLD6/VR101	5.90	SV83 (Svetlana)	4.75	X201A/301A	Call
ECF83	8.20	EM1188C	90.75	MU12-14	4.55	T-20	42.55	Y65	8.20
ECF804	5.90	EMM801	Call	NL803	Call	TD03-10/DET2	34.00	Y-1938	17.00
ECH3	11.15	EY91	2.85	NL807	Call	TJ880	10.95	YL1080	11.35
ECH21	8.85	EY802	5.25	NL809	Call	U709	22.70	Z66	2.75
ECL81	9.00	EZ2/3	10.50	NL841	23.75	UABC80	4.10	ZM1000	29.00
ECL83	7.90	EZ41	6.30	NL848	19.35	UBF11	10.50	ZM1001	44.20
ECL113	9.80	FG-27A	58.60	NL5442A	10.20	UBL1	Call	ZP1400	10.50
ECL805	9.00	FG-81A	79.40	NL5866STX	12.60	UBL21	6.55		
EF9	Call	FG-178-A	18.20	NL5870S	12.60	UCC84	2.75		
EF12	6.20	FM1000	6.65	NL5992	10.20	UCH4	10.50		
EF22	3.90	GS10C	60.70	NL8037/5031	6.55	UCL81	10.50		
EF37A	12.40	GS10D	11.35	NR43	10.50	UCL83	2.75		

USED TUBES

TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE	TUBE TYPE	PRICE
01A (ST)	Call	6L6	4.75	42 (ST)	Call	246	Call	5932/6L6WGB	14.20
2A3	34.00	6L6G	17.00	45 SPECIAL	85.05	247	Call	5933/807W	Call
2A3 (single plate)	Call	6L6GC (US)	13.65	45 (ST)	31.50	250	210.60	6080	5.05
2A5	6.20	6LB6	12.60	46 (ST)	Call	256	17.35	6146-A-B	11.25
5AR4/GZ34	Call	6LF6/6MH6	Call	47 (ST)	8.00	280	42.00	6336-A-B	18.20
5AS4A/5U4GB	7.70	6LR6	18.40	50 (ST)	151.00	281	27.20	6550-A (US)	22.70
5R4WGA-B-Y	5.70	6LX6	18.30	71A (ST)	Call	300B (WE)	Call	6550 (US, ST)	45.40
5U4G/5AS4	10.85	6MJ6	30.90	75 (ST)	6.95	310A-B (WE)	Call	7027-A	26.25
5V4G	6.00	6N6G	13.55	76 (ST)	6.55	311A-B	Call	7591A	Call
5V4GA	4.85	6P5G	Call	80 (ST)	10.20	350B (WE)	205.00	8005	73.75
5Y3G	Call	6Q7G	Call	81 (ST)	7.35	421A (WE)	Call	8068	28.90
6A5G	Call	6V6G	8.40	82 (ST)	6.85	485	11.55	8643	63.00
6A7	Call	6V6GT	5.70	83	Call	715A-B-C	15.65	8908	Call
6AC5G	Call	10 (ST)	42.55	112A	26.70	801-A	34.00	8950	Call
6AS7G/6520	3.70	10Y (ST)	42.55	171-A	34.00	805	45.40	BR	10.50
6B4G	15.90	12A (ST)	Call	203A	Call	807	7.05	CX12	39.70
6BK4C/6EL4A	6.30	12AX7-A (US)	5.45	210	Call	810	54.40	KT66 (GEC)	Call
6E5	8.50	12BH7A	Call	211/VT-4C	89.25	811A (US)	17.00	KT88 (GEC)	Call
6F5G	Call	15	10.00	222	9.15	813	20.50	KT-88 (British)	104.00
6F6G	10.40	20LF6	Call	224	6.85	814	11.35	TZ-40	Call
6F6GT	Call	21JS6A/23JS6	Call	226	10.70	830B	Call	UXCV11	56.70
6HF5	6.30	24A (ST)	5.35	227	10.85	866A	9.35	V199	41.50
6JB6A	11.90	25L6G	4.00	232	11.55	866JR	10.20	V201A	Call
6JE6C/6LQ6	22.70	26 (ST)	8.10	235/251	4.10	872-A	27.20	X199	32.05
6JG6A	Call	27 (ST)	3.15	236	4.85	950 (ST)	8.70	X201A/301A	Call
6JS6C	22.05	30	7.35	237	Call	5691 (red base)	25.00		
6JT6A	Call	41 (ST)	5.15	238	11.15	5692 (red base)	32.40		
6KD6	18.50	42 (globe)	47.25	245	76.55	5881/6L6WGB	17.00		

[illegible]

1) Gold plated contacts. 2) Most have 4 tie lugs on saddle. If you specifically desire to have or not have tie lugs on saddle, please specify this on your order. 3) Most have a center shield. 4) Mounts to chassis with wavy washer, or with adapter plate **P-SH12-1-31** (sold separately), using the wavy washer to attach the socket to the adapter plate. 5) Press in contact tails provide mechanical retention prior to soldering to PC board. 6) Socket rests on shoulder of contact tail, providing an air gap for cooling. For $\frac{1}{8}$ " circuit boards with bottom circuitry. 7) Mounting hardware not available. 8) This socket is just a bit too big to be used with adapter plate **P-SH-12-1-31**, but can be mounted to chassis with wavy washer. 9) As far as we can tell, these sockets are designed to be pressed into the chassis and braised. Buy a few and try! 10) Mounting ring provided allows socket to be mounted from the top or the bottom of the chassis. 11) Very similar to **P-ST7-201MX**, but saddle ring wraps over top of socket, good for very thin chassis material where the **P-ST7-201MX** might protrude too far.

Five different styles of P-ST7 and P-ST8 heat sinks are shown. From left to right: P-ST7-198 (a cylindrical heat sink with a central hole and six mounting tabs), P-ST7-218 (a circular heat sink with a central hole and eight mounting tabs), P-ST7-815 (a circular heat sink with a central hole and eight mounting tabs, similar to P-ST7-218 but with a different internal structure), P-ST8-185 (a circular heat sink with a central hole and eight mounting tabs, similar to P-ST7-218 but with a different internal structure), and P-ST8-324 (a circular heat sink with a central hole and eight mounting tabs, similar to P-ST7-218 but with a different internal structure).

P-ST7-198 P-ST7-218 P-ST7-815 P-ST8-185 P-ST8-324

Socket Type	Insulator Material	Top Bot. Mnt.	Mounting Centers(*)	Chassis Hole Dia. (*)	Notes	Part No.	Price
8 pin octal - EL34/6SL7 size							
mip	P	b	1½	1⅞		P-ST8-485	\$5.00
mip	M	t,b	1½	1⅞		P-ST8-209MIP	\$5.00
saddle - plate, nos	C	b	1½ to 1⅞	1⅞		P-ST8-33008	\$10.95
saddle - plate	M	t	1½	1⅞		P-ST8-209M-2	\$3.50
saddle - plate	M	b	1½	1⅞		P-ST8-209MI	\$3.50
saddle - plate, black	P	b	1½	1⅞		P-ST8-209M	\$3.00
saddle - plate, black	P	b	1½	1⅞		P-ST8-483	\$2.70
saddle - plate, brown	M	b	1½	1⅞		P-ST8-484	\$3.00
saddle - ring mount, China	C	t,b	1⅞	1⅞ to 1¼	10, 15	P-ST8-800	\$2.50
saddle - ring mount, China	C	t,b	1⅞	1⅞ to 1¼	10, 15	P-ST8-801	\$2.50
saddle	P	b	1¼	1		P-ST8-808	\$3.00
type S	P	t		1⅞	4	P-ST8-311	\$2.50
type S	M	t		1⅞	4	P-ST8-318	\$2.50
all molded	P	b	1⅞	1⅞		P-ST8-482	\$1.00
wafer	P	b	1½		oval	P-ST8-127	\$1.00
wafer	P	b	1½		rectangular	P-ST8-128	\$1.00
wafer	P	b	1⅞			P-ST8-209W	\$1.00
pc - wafer	P	t		1⅞ pin circle		P-ST8-814	\$0.50
pc - stand-off, China	C	t	-	1tail dia.	6	P-ST8-193	\$2.70

9 pin magnoval - EL509/6KG6A size							
all molded	C	t,b	1⅞, 1⅞	⅞ t, 1¼ b		P-ST9-509	\$5.00

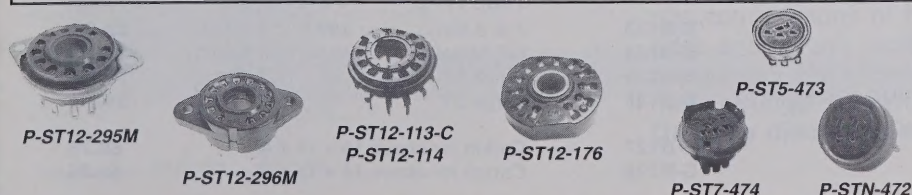
9 pin miniature - 12AX7/12BH7 size							
saddle - plate	P	b	1⅞	¾	no solder lugs	P-ST9-211M	\$2.30
saddle - plate	P	b	1⅞	¾	solder lugs	P-ST9-211ML	\$2.50
saddle - plate	M	b	1⅞	¾		P-ST9-137	\$2.50
saddle - plate	P	b	1⅞	¾		P-ST9-137B	\$2.30
saddle - shield base, China	P	t	1⅞	¾		P-ST9-213	\$3.00
saddle - molded	M	t,b	⅞ or 1	¾	16	P-ST9-265	\$0.75
saddle - shock mount	M	b	1¼	¾		P-ST9-137R	\$1.95
saddle - China	C	t(b)	1⅞	⅞	10, 14	P-ST9-511	\$1.95
wafer	P	b	1⅞		rectangular	P-ST9-149	\$0.75
wafer	P	b	1⅞		oval	P-ST9-150	\$0.75
pc - stand-off, China, white	P	t	-	¾ tail dia.	6	P-ST9-215	\$2.95
pc - stand-off	P	t	-	⅞ tail dia.	6	P-ST9-215B	\$2.80
pc - stand-off	P	t	-	⅞ tail dia.	6	P-ST9-216	\$2.00
pc mount - split tail	P	t	-	.781 tail dia.		P-ST9-218	\$1.50
pc mount wafer - split tail	P	t	-	.781 tail dia.		P-ST9-217	\$1.50
pc - snap in	M	t			17	P-ST9-521	\$0.50
pc - snap in	P	t			18	P-ST9-520	\$0.50
pc - snap in	M	t			17	P-ST9-522	\$0.50
molded - 90° stand-off, white	P	-	1½	-		P-ST9-264	\$0.50
braise - tele. shield	M	t	-	¾	9	P-ST9-161	\$0.50

9 pin compactron - 6KV6/6JE6 size							
saddle - plate	P	b	1⅞	1		P-ST9-226	\$2.50
saddle - plate	P	b	1⅞	1		P-ST9-254M	\$2.50
pc - stand-off	P	t		⅞ tail dia.	6	P-ST9-215-1	\$2.00
pc - stand-off	M	t		⅞ tail dia.	6	P-ST9-215-2	\$2.25

12 pin compactron - 6LF6/20LF6 size							
saddle	M	b	1⅞	1		P-ST12-295M	\$2.70
all molded, black	P	t,b	1⅞	1⅞	6	P-ST12-296M	\$2.65
pc - stand-off, red	P	t	-	⅞ tail dia.		P-ST12-113-C	\$2.50
pc - stand-off, black	P	t	-	1⅞ tail dia.	6	P-ST12-114	\$2.00
pc - press tails	P	t	-	1.063 tail dia.	5	P-ST12-176	\$1.00

Nuvistor Sockets							
pc, 5 pin	M	t	½" tabs	-		P-STN-472	\$2.70
ring type, 5 pin	M	t	-	-	7	P-ST5-473	\$2.70
ring type, 7 pin	P	t	-	-	7, shield collar	P-ST7-474	\$3.00

INSULATOR MATERIALS: C = ceramic, M = micalex, P = phenolic.



SOCKET NOTES (CONT.)

12) Bossed mounting holes and recessed rivets allows sub-panel mounting. 13) Mounting holes not bossed, nor are rivets recessed, mount with stand-offs. 14) Separate mounting ring is designed for top mounting but could be used for bottom mounting in thin gauge chassis (< 0.06" thick). 15) P-ST8-800 and P-ST8-801 are identical except for contact style. P-ST8-800 has split circular contacts, while P-ST8-801 has split straight contacts. 16) Unique molded saddle allows for off center mounting of socket. Socket can be mounted closer to edge of chassis or other components. 17) Top or bottom soldering. 18) Bottom soldering only.

**"TYPE S" SOCKET ADAPTER PLATE**

When hole in chassis is too large to mount Type S sockets directly to chassis with wavy washer, this adapter can be used. 1 $\frac{1}{16}$ " dia. opening in plate, 1 $\frac{1}{2}$ " to about 1 $\frac{1}{8}$ " mounting centers can be used. Socket is secured to plate with wavy washer.

Wavy washer for above

P-SH12-1-31	\$1.25
P-SH2-104-2	\$0.25

TUBE SHIELDS**bayonet style with spring**

7 pin, 1 $\frac{3}{8}$ " tall, steel, NOS	P-SS7-157	\$0.75
7 pin, 1 $\frac{3}{4}$ " tall, steel, NOS	P-SS7-158	\$0.75
7 pin, 2 $\frac{1}{4}$ " tall, steel, NOS	P-SS7-194	\$1.00
7 pin, 1 $\frac{7}{8}$ " tall w/base, alum, China	P-SS7-160	\$1.50

9 pin, 1 $\frac{1}{2}$ " tall, steel, NOS (Eby)	P-SS9-161	\$1.95
9 pin, 1 $\frac{1}{2}$ " tall w/base, steel, China	P-SS9-162	\$1.95
9 pin, 1 $\frac{7}{8}$ " tall w/base, steel, China	P-SS9-163	\$1.95
9 pin, 1 $\frac{7}{8}$ " tall w/base, alum, China	P-SS9-325	\$1.95

9 pin shield base for bayonet shields. 1 $\frac{1}{8}$ " mounting centers for use with saddle and wafer sockets.

P-SS9-325B	\$0.75
------------	--------

other types (nos) (while supplies last!)

9 pin short, heat dissipating shield	P-SS9-164	\$1.50
7 pin, 1 $\frac{3}{8}$ " tall, push-on (pictured)	P-SS7-173	\$0.50
7 pin, 1 $\frac{3}{8}$ " tall, push-on (straight sides)	P-SS7-195	\$0.50

MILLEN CERAMIC OCTAL SOCKET

Military grade octal socket. Ceramic skirt for long leakage path to chassis, 5,700 VDC rating. Silver plated phosphor bronze contacts. With nickel plated steel mounting saddle. 1 $\frac{1}{8}$ " hole. P-ST8-33008 \$10.95

**SVETLANA SOCKETS**

See page 39 for application for various Svetlana tubes.

OUR PART NO.	SVETLANA PART NO.	PRICE
P-ST-SK1A	SK1A	\$65.00
P-ST8-SK2A	SK2A	\$10.00
P-ST-SK3A	SK3A	\$150.00
P-ST4-191	SK4A	\$3.50

GRID/PLATE CAPS

Ceramic	1 $\frac{1}{4}$ " (6K7)	P-SG116	\$5.95
Plastic w/lead	2 $\frac{3}{64}$ " (807)	P-SG118	\$5.95
Ceramic	3 $\frac{3}{8}$ " (807)	P-SG110	\$2.50
Ceramic	7 $\frac{7}{16}$ " (807)	P-SG111	\$2.50
Ceramic	9 $\frac{1}{16}$ " (811/572B)	P-SG115	\$2.50

**OCTAL RELAY SOCKET**

Great for experimenting! Use anywhere you would use a normal octal tube socket, but use screw terminal strips to attach wiring. No need to mount socket and solder leads. P-ST8-108S \$8.95

**TUNING EYE ADAPTER**

6 pin plug-in adapter allows hard to find 6U5 or similar tuning eye tubes to be replaced with readily available 1629 tubes.

P-SA314	\$16.50
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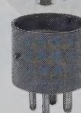
7591 TUBE ADAPTER

Replace expensive and hard to find 7591 tubes with less expensive 6GM5 tubes. 1 $\frac{1}{4}$ " dia. x 1" tall. Overall height with tube is about 1 $\frac{1}{8}$ " taller than 7591 tube alone.

P-SA317	\$13.95
---------	---------

**OCTAL TUBE BASE**

Used for octal plug or coil form. Can be used as connecting plug for S-Z286 battery. 1 $\frac{1}{4}$ " dia. x 1 $\frac{1}{8}$ " high. P-SP8-476 \$2.00

**4-PIN TUBE BASE**

Used for 4-pin plug or coil form. 1 $\frac{1}{8}$ " dia. x 1 $\frac{1}{8}$ " high.

P-SP4-477	\$2.00
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SVETLANA CONNECTOR CLIPS

The Svetlana AC line of connector clips are for use with tubes as shown on page 39. They are suitable for connection to the anode and/or grid cap of the tube. Each is a silver-plated spring clip. The user should select appropriate hardware to mate with wire or copper straps depending on the application.

CLIP	APPX. DIA.	PART NO.	PRICE
AC-1	0.565"	P-SAC-1	\$2.60
AC-2	0.815"	P-SAC-2	\$5.70
AC-3	0.875"	P-SAC-3	\$11.00
AC-4	0.453"	P-SAC-4	\$2.60
AC-5	0.570"	P-SAC-5	\$5.70

TUBE BOXES

Heavy plain white boxes with dividers to cushion tube. Save 15% by purchasing 100 of any one type, save even more by the case.

Minimum order - 10 of any one size.

PART NO.	BOX SIZE (")	LBS/ 100	EACH	PER 100	CASE	
					QTY	PRICE
S-B247	1 x 1 x 3 (Miniature)	1.0	\$0.15	\$12.75	1500	\$157.50
S-B254	1 x 1 x 3 $\frac{1}{4}$ (Miniature)	1.0	\$0.20	\$17.00	1500	\$210.00
S-B248	1 $\frac{5}{16}$ x 1 $\frac{5}{16}$ x 3 $\frac{11}{16}$ (GT)	1.5	\$0.19	\$16.15	750	\$99.75
S-B249	1 $\frac{5}{8}$ x 1 $\frac{5}{8}$ x 4 $\frac{15}{16}$ (Large GT)	3.0	\$0.25	\$21.25	650	\$113.75
S-B251	1 $\frac{7}{8}$ x 1 $\frac{7}{8}$ x 5 $\frac{3}{8}$	4.0	\$0.27	\$22.95	800	\$151.20
S-B252	2 $\frac{1}{4}$ x 2 $\frac{1}{4}$ x 6 $\frac{1}{8}$	5.5	\$0.33	\$28.05	500	\$115.50
S-B253	3 x 3 x 7	7.0	\$0.42	\$35.70	300	\$88.20

Heavy plain boxes with no divider for larger industrial and transmitting tubes.

S-B120	3 x 3 x 10	\$0.50
S-B122	4 x 4 x 4	\$0.45

TUBE EGG CRATE

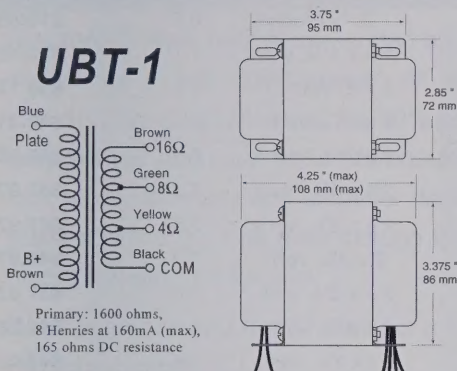
15" x 15" egg crate packing boxes designed for storing tubes. Supplied unassembled.

TUBE TYPE	# CELLS/SIZE	PRICE
S-B123	7 & 9 min.	289 - 7 $\frac{7}{8}$ " x 1 $\frac{3}{4}$ "h \$6.00
S-B124	GT, Metal	121 - 1 $\frac{5}{16}$ " x 2 $\frac{3}{4}$ "h \$6.75
S-B125	Small ST	81 - 1 $\frac{1}{2}$ " x 3" h \$5.00
S-B126	Large ST	64 - 1 $\frac{13}{16}$ " x 3 $\frac{3}{4}$ "h \$4.50
S-B127	Carton for above, 15 x 15 x 4"	\$2.75
S-B128	Carton for above, 15 x 15 x 5"	\$2.75

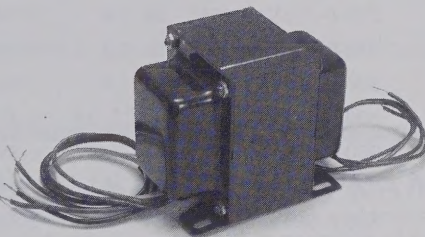
one electron™ Single Ended Output & Power Transformers

ALL DESIGNS BY JOHN ATWOOD. MANUFACTURED IN THE UNITED STATES.

UBT-1

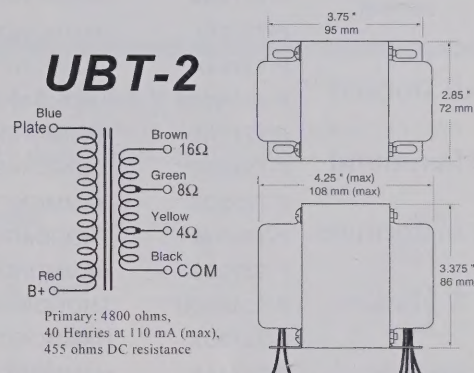


The UBT-1 is a low-impedance single-ended output transformer intended for parallel combinations of tubes running at B+ voltages of 250 to 325 volts, such as: two or three EL34s (triode-connected), three 2A3s, two 300Bs, two 6AS7s, etc., as well as single sweep tubes run in "enhanced-triode" mode, resulting in 10 to 15 watts of output power. The UBT-1's low impedance gives an exceptionally broad frequency range of 10Hz to over 75KHz (at 1 watt). This transformer has been the basis for excellent-sounding single-ended amps, and is notable for its clean, detailed sound. **Quantity discounts available.** 6.1 lbs. **P-TUBT-1 \$99.00**



The UBT-2 is the same size and power (15 watts) as the UBT-1, but has a higher primary impedance suitable for single tubes running at B+ voltages of 400 to 500 volts, such as: 50, WE 300B, Svetlana SV811-3A (tubular shape glass), SV-572-3, etc. The trade-off of a higher impedance transformer is worse bandwidth, but additional interleaving was added in the UBT-2 to extend the frequency range from 10Hz to over 55KHz (at 1 watt). Plate supply voltages over 600 volts are not recommended. **Quantity discounts available.** 6.0 lbs.

UBT-2

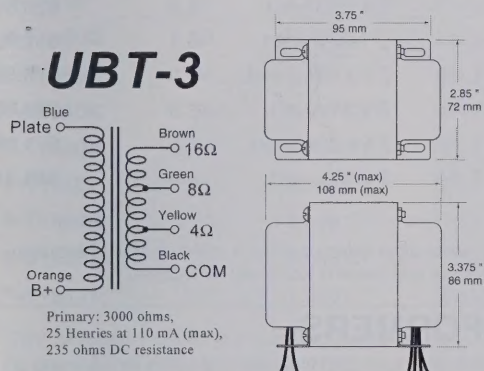


P-TUBT-2

\$119.00

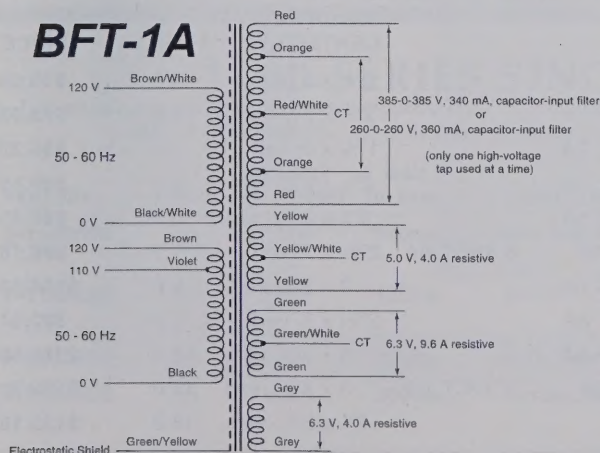
FOR COMPLETE SPECIFICATIONS, VISIT www.one-electron.com/trans.html

UBT-3

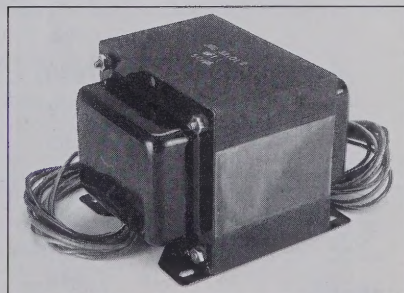


The UBT-3 is the same size and power (15 watts) as the UBT-1, but has a primary impedance suitable for single or paralleled tubes running at B+ voltages of 300 to 400 volts, such as: 2A3, WE 300B, 50, etc. The frequency response is from 10Hz to over 60KHz (at 1 watt). The 3K primary impedance offers lower distortion at only slightly less power in designs using the commonly-specified 2.5K transformers. **Quantity discounts available.** 6.1 lbs. **P-TUBT-3 \$119.00**

BFT-1A



The BFT-1A was designed to power a stereo amplifier using a UBT-1 in each channel, but it will also power an amplifier using two UBT-1s (one for each channel), or an 80 watt push-pull amplifier. The tapped high-voltage windings provide flexibility in design. Three filament windings, two center-tapped, allow various combinations of filamentary triodes and/or tube rectifiers to be used. An electrostatic shield between the primary and secondary reduces power-line noise coupling. The primary arrangement allows use on virtually any power grid in the world. **Quantity discounts available.** 15 lbs. **P-TBFT-1A \$165.00**



POWER TRANSFORMERS

Replacements for 1930 to 1950 AC radios and tube type equipment. 117 Volt primary, 50/60 Hz. Provided with color-coded leads.



Horizontal



Vertical

All stocked

Hammond

transformers

& chokes

are priced

10% below

Hammond's

retail price!

PART NO.	MFG.	RATING			MOUNTING CENTERS(")	LBS.	PRICE
P-T263AX	HAMMOND	100-0-100V, 100MA	5V, 2A		2½ x 1⁹⁄₁₆, vert.	1.5	\$34.15
P-T442	AES	125V, 15MA	12.6V, .3A		2, U-bracket	0.7	\$19.95
P-T269AX	HAMMOND	125-0-125V, 100MA	6.3V, 2A		1¾ x 1⁷⁄₁₆, vert.	1.7	\$33.45
P-T261M6*	HAMMOND	215V, 269MA	6.3V, 4A		2 x 2, vert.	4.0	\$56.12
P-T270CAX	HAMMOND	250-0-250V, 70MA	5V, 2A	6.3VCT, 2.5A	2 x 2³⁄₁₆, vert.	3.2	\$46.31
P-T270CBX	HAMMOND	250-0-250V, 100MA	5V, 2A	6.3VCT, 3A	2 x 2¹⁄₁₆, vert	3.5	\$52.50
P-T26R31**	THORDARSON	260-0-260V, 90 MA		6.3V, 4A	2¼ x 2⁷⁄₈, horiz.	3.5	\$47.97
P-T270DAZ	HAMMOND	260-0-260V, 90 MA		6.3V, 4A	2¼ x 2⁷⁄₈, horiz.	3.5	\$47.97
P-T270DAX	HAMMOND	260-0-260V, 90 MA		6.3V, 4A	2 x 2¹⁄₈, vert.	3.3	\$47.97
P-T270BX	HAMMOND	275-0-275V. 50MA	5V, 2A	6.3V, 2A	2¹⁄₈ x 2¼, vert.	3.3	\$37.53
P-T270DX	HAMMOND	275-0-275, 90MA	5V, 2A	6.3V, 3A	2 x 1¹⁵⁄₁₆ vert.	3.3	\$42.05
P-T272BX	HAMMOND	300-0-300V, 100MA	5V, 2A	6.3V, 3A	2½ x 2½, vert.	3.5	\$44.00
P-T272FX	HAMMOND	300-0-300V, 150MA	5VCT, 3A	6.3VCT, 5A	2½ x 3½, vert.	5.0	\$56.42
P-T272JX	HAMMOND	300-0-300V, 250MA	5VCT, 4A	6.3VCT, 8A	2¹⁵⁄₁₆ x 3, vert.	7.6	\$67.63
P-T24R01**	THORDARSON	325-0-325V, 40MA	5V, 2A	6.3VCT, 2A	2 x 2½, horiz.	2.6	\$49.88
P-T273AZ	HAMMOND	325-0-325V, 40MA	5V, 3A	6.3VCT, 5A	2 x 2, horiz	5.8	\$49.88
P-T24R87**	THORDARSON	325-0-325V, 150MA	5V, 3A	6.3VCT, 5A	2½ x 2½, vert.	5.8	\$75.00
P-T273CZ	HAMMOND	325-0-325V, 150MA	5V, 3A	6.3VCT, 5A	2½ x 2½, vert.	5.8	\$75.00
P-T24R40**	THORDARSON	350-0-350V, 90MA	5V, 2A	6.3VCT, 3A	2¼ x 2¹³⁄₁₆, horiz.	4.5	\$64.70
P-T273DZ	HAMMOND	350-0-350V, 90MA	5V, 2A	6.3VCT, 3A	2¼ x 2¹³⁄₁₆, horiz.	4.5	\$64.70
P-T24R40U**	THORDARSON	350-0-350V, 90MA	5V, 2A	6.3VCT, 3A	2¼ x 2³⁄₈, vert.	4.5	\$64.70
P-T273DX	HAMMOND	350-0-350V, 90MA	5V, 2A	6.3VCT, 3A	2¼ x 2³⁄₈, vert.	4.5	\$64.70
P-T274AX	HAMMOND	360-0-360V, 120MA	5V, 3A	6.3VCT, 3.5A	2½ x 2⁷⁄₁₆, vert.	5.5	\$59.59
P-T443**	SURPLUS	370-0-370V, 60MA		6.3V, 2A	2 x 2½, horiz.	2.8	\$20.50
P-T274BX	HAMMOND	375-0-375V, 175MA	5VCT, 3A	6.3VCT, 6A	2¹¹⁄₁₆ x 3, vert.	6.1	\$62.62
P-T278X	HAMMOND	400-0-400V, 200MA	5VCT, 3A	6.3VCT, 6A	2½ x 2¹¹⁄₁₆, vert.	7.0	\$78.50
P-T278CX	HAMMOND	400-0-400V, 465MA		6.3VCT, 6A	3 x 4³⁄₁₆, vert.	12.5	\$83.73
P-T279X	HAMMOND	425-0-425V, 150MA	5VCT, 3A	6.3VCT, 5A	2½ x 2¹¹⁄₁₆, vert.	6.0	\$71.39
P-T282X	HAMMOND	500-0-500V, 200MA	5VCT, 3A	6.3VCT, 6A	3 x 3³⁄₁₆, vert.	9.6	\$85.45

* For European radios

** While supplies last

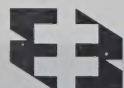
NOTE: It is important that every receiver be carefully checked before a burned out transformer is replaced. Too often some other defect, such as a defective tube, electrolytic condenser, or a partial circuit short has caused the original burnout and the replacement transformer is also ruined before the real cause is found and remedied!!!!

CLASSIC 300 SERIES POWER TRANSFORMERS

Picks up where the 200 series leaves off! High quality, high voltage! "World power", with primary voltages of 100, 110, 120, 200, 220, 240 V @ 50/60 Hz. All have a secondary bias tap at 50 VAC. Concentric wound for low stray field and low noise. Hipot tested to 2500 VAC. Epoxy painted to match 1650 series output transformers. The P-T300BX is designed specifically for 300B's, the P-T302AX is designed specifically for 2A3's.

PART NO.	VA	RATING				MOUNTING CENTERS(")	LBS.	PRICE
P-T369AX	40	250VCT, 100MA	6.3VCT, 2A			1 ¹¹ / ₁₆ x 2, vert.	2.6	\$49.09
P-T363CX	119	360VCT, 250MA	5VCT, 3A			2 ⁷ / ₁₆ x 2 ¹ / ₂ , vert.	5.6	\$73.63
P-T370BX	55	550VCT, 50MA	5VCT, 2A	6.3VCT, 2A		1 ¹⁵ / ₁₆ x 2, vert.	3.0	\$55.22
P-T372BX	98	600VCT, 100MA	5VCT, 2A	6.3VCT, 3A		2 ³ / ₁₆ x 2 ¹ / ₂ , vert.	4.8	\$69.55
P-T372FX	150	600VCT, 150MA	5VCT, 3A	6.3VCT, 5A		2 ¹ / ₂ x 2 ¹⁵ / ₁₆ , vert.	6.2	\$83.45
P-T302AX	198	600VCT, 200MA	2.5VCT, 2.5A	5VCT, 3A	6.3VCT, 6A	2 ¹³ / ₁₆ x 3, vert.	7.9	\$98.18
P-T372JX	243	600VCT, 250MA	5VCT, 4A	6.3VCT, 8A		3 x 3 ⁵ / ₁₆ , vert.	9.6	\$100.63
P-T374BX	200	750VCT, 175MA	5VCT, 3A	6.3VCT, 6A		2 ¹³ / ₁₆ x 3, vert.	7.9	\$92.04
P-T378X	237	800VCT, 200MA	5VCT, 3A	6.3VCT, 6A		3 x 3 ¹ / ₁₆ , vert.	8.9	\$116.60
P-T300BX	280	800VCT, 250MA	5VCT, 1.2A	5VCT, 3A	6.3VCT, 6A	3 x 3 ¹³ / ₁₆ , vert.	12.0	\$122.72
P-T378CX	465	800VCT, 465MA	6.3VCT, 6A			3 ¹ / ₂ x 3 ⁹ / ₁₆ , vert.	18.2	\$125.18

HAMMOND
MANUFACTURING™



Hammond Classic Tube Transformers

Hammond offers both single-ended and push-pull audiophile tube output transformers in their 1600 series. All specifications shown are at **full rated power**. All include multiple interleaved windings to maximize high frequency response and all include Ultra-Linear taps at the 40% point. High grade laminations (M6) and high quality copper wire are used. The core is varnished and oven baked to ensure quiet operation, even at high ambient temperature. Hammond achieves a classic look to complement any amplifier design by finishing the end bells with a tough, low gloss, black powder paint finish to resist scratching. End bells include knockouts for optional above chassis wiring. From 3 to 280 watts, Hammond has the output transformer for you.

Don't see what you need? Give us a call and we'll get a Hammond Classic catalog out to you. We can special order **any** Hammond product.

1600 SERIES PUSH-PULL TRANSFORMERS

Enclosed (shielded), 4 slot, above chassis Type "X" mounting. Frequency response 30 Hz to 30 kHz at full rated power (+/-1 db max. ref. 1 kHz) minimum. All units have secondary impedance of 4/8/16 ohms. Flexible 8" leads.

PART NO.	WATTS	PRIMARY IMP. (OHMS)	MOUNTING CENTERS(")	LBS.	SUGGESTED TUBE TYPES	PRICE
P-T1608	10	8,000 CT	2 1/8 x 1 3/4, vert.	2.5	6AQ5, 6V6, 6BQ5, EL84	\$36.82
P-T1615	15	5,000 CT	2 x 2 1/16, vert.	3.3	2A3, 6A3, 6AQ5, 6B4G, 6L6, 6V6	\$41.18
P-T1620	20	6,600 CT	2 1/8 x 2 1/2, vert.	3.5	6AQ5, 6L6, 6V6	\$42.22
P-T1650F	25	7,600CT	2 x 2 1/16, vert.	4.0	6L6GC, 6V6, 807, 5881, EL34	\$55.22
P-T1645*	30	5,000 CT	2 3/16 x 2 1/2, vert.	4.5	6L6GC, 6V6, 807, 5881, EL34	\$55.22
P-T1650G	35	3,400CT	2 x 2 1/16, vert.	4.0	6L6GC, 6V6, 807, 5881, EL34	\$66.85
P-T1650H	40	6,600 CT	2 1/2 x 2 1/16, vert.	6.5	6L6GC, 807, 5881, EL34	\$84.58
P-T1650K	50	3,400 CT	2 1/2 x 3 1/4, vert.	7.0	6L6GC, 807, 5881, EL34, 6146B, 6550B, 6550C	\$89.14
P-T1650N	60	4,300 CT	2 1/2 x 2 5/16, vert.	8.0	6L6GC, 807, 5881, EL34, 6146B, 6550B, 6550C, KT88	\$79.78
P-T1650P	60	6,600 CT	2 1/2 x 2 5/16, vert.	8.0	6L6GC, 807, 5881, EL34, 6146B, 6550B, 6550C	\$79.78
P-T1650R	100	5,000 CT	3 x 3 1/2, vert.	12.0	807, 5881, EL34, 6146B, 6550B, 6550C, KT88	\$82.85
P-T1650T	120	1,900 CT	3 x 4, vert.	14.0	6L6GC, 5881, EL34, 6550B, 6550C, KT88	\$96.28
P-T1650W	280	1,900 CT	4 1/2 x 5, vert.	28.0	6L6GC, 5881, EL34, 6550B, 6550C, KT88	\$184.10

*70V secondary winding in addition to the 4/8/16

Rotary impedance selector for 1600 series transformers is available on next page.

The examples of possible combinations are to help you narrow down the choices of transformers for your favorite tube type. How you operate the tubes (push-pull, push-pull parallel, ultra-linear, etc.) will change the optimum plate to plate load impedance. A tube manual or technical data sheet should be consulted before choosing an output transformer.

1600 SERIES SINGLE-ENDED TRANSFORMERS

Enclosed (shielded), 4 slot, above chassis Type "X" mounting. Frequency response at least 20 Hz to 20 kHz at full rated power (+/-1 db max. ref. 1 kHz) minimum. All units have secondary impedance of 4/8/16 ohms. Flexible 8" leads. Each weighs 11 pounds.

PART NO.	WATTS	PRIMARY IMP. (OHMS)	MAX DC BIAS	SUGGESTED TRIODES	SUGGESTED PENTODES	PRICE
P-T1627SE	25	2,500	160ma	2A3, 6A3, 6B4G, 300B	6CA7, 6L6, 807, 5881, 6550 Parallel 6AQ5, 6V6, EL84	\$97.52
P-T1628SE	25	5,000	120ma	SV572-3, SV572-10, 211, 300B	6AQ5, 6V6, 6L6, 807, 5881, 6550, EL84	\$97.52
P-T1629SE	25	6,500	100ma	811A, SV811-10, 572B, SV572-30 & 160		\$97.52
P-T1640SE	25	1,250	200ma	Parallel 2A3, 6A3, 6B4G, 300B	Parallel 6550, 6CA7	\$97.52

OTHER OUTPUT TRANSFORMERS

Transformers for Hi-Fi, guitar amplifiers or PA system applications.

PART NO.	MFG.	OUTPUT WATTS	IMPEDANCE-OHMS PRIMARY SECONDARY	FREQUENCY RESPONSE-Hz	MOUNTING CENTERS(")	LBS.	PRICE
P-T22S60**	THORDARSON	8	2.5K/4.K push/pull	3.5/8	2 $\frac{1}{8}$, u-bracket	1.0	\$19.95
P-TK31**	SURPLUS	8	5K single-ended	8	2 $\frac{3}{8}$, u-bracket	0.7	\$7.95
P-TK7**	SURPLUS	10	2.5K single-ended	16	3 $\frac{1}{8}$, u-bracket	1.3	\$5.95
P-TS142A	AES	15	8,000 CT*push/pull	16/8/4	2 x 2 $\frac{7}{16}$, vert.	3.4	\$62.50
P-T24S57**	THORDARSON	35	6,600 CT push/pull	4/8/16/250/500	2 $\frac{1}{2}$ x 2 $\frac{7}{16}$, vert.	4.7	\$66.85

* Screen taps provided **While supplies last

AUDIO OUTPUT TRANSFORMER

Single plate, 3 watt output, 2500 ohm primary, 8 ohm secondary impedance. U-bracket with 1 $\frac{1}{2}$ " mounting centers. 0.2 lb.

P-T983 \$4.95

ROTARY IMPEDANCE SELECTOR - FOR USE WITH HAMMOND 1600 SERIES TRANSFORMERS

Hammond 1600 series transformers all provide secondary impedances of 4, 8 or 16 ohms, but due to the unique wiring of the secondary, the impedance cannot be changed without rewiring....Until now. We now offer a selector switch, pre-wired and complete with $\frac{1}{4}$ " jack output. Follow simple instructions provided to wire transformer secondary to switch, mount switch and $\frac{1}{4}$ " jack in separate $\frac{3}{16}$ " diameter holes in chassis and you'll easily be able to select output impedance as needed.

P-H1600

\$12.95

Hammond Transformer - built in response to requests from the "Collins Collectors Association".

Key features:

Isolation unit (i.e. separate primary and secondary)

Primary: 600 Ohm (with 6" wire leads)

Secondary: 8 Ohm with 4 Ohm center tap (with solder lugs)

Power: Rated at 12 watts

Frequency Response: 30 Hz - 20 kHz

Weight: 1.3 lbs.

Mounting: 2 hole u-bracket mount - on 2 $\frac{1}{8}$ " mounting centers

P-T119DA

\$18.35



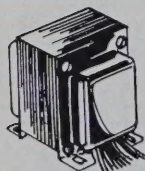
UNIVERSAL OUTPUT TRANSFORMERS

Multi-tap transformers have tables provided to choose pre-calculated impedance ratios. Secondary impedances from 1.5 to 15 ohms. Leads on primary, solder lugs on secondary. U-bracket mounting. For single or push-pull applications.

PART NO.	MFG.	OUTPUT WATTS	PRIMARY-Z OHMS	MOUNTING CENTERS(")	LBS.	PRICE
P-T125J	HAMMOND	8	1,200 to 25,000	1 $\frac{1}{4}$	0.3	\$19.95
P-T125A	HAMMOND	3	1,200 to 25,000	1 $\frac{1}{4}$	0.3	\$26.88
P-T291	AES	8	4,000 to 10,000	2 $\frac{1}{8}$	0.7	\$15.95
P-T125E	HAMMOND	15	1,200 to 25,000	3 $\frac{1}{8}$	1.5	\$29.80
P-T125H	HAMMOND	8	1,200 to 25,000	2 $\frac{1}{8}$	1.0	\$16.95

SPECIAL POWER TRANSFORMERS WITH 2.5V. FIL. WINDINGS (120V. 60HZ PRI.)

These transformers have been custom manufactured to provide the replacement needs for early 30's radios. No. P-T142 will work in most 4 and 5 tube sets while No. P-T143 will work in most 6 and 7 tube sets. Supplied with vertical mounting shells, both have the leads coming out one side so that horizontal mounting may be used (see note). P-T143 provides a separate filament winding for audio output stages but both 2.5V windings can be paralleled for the combined current rating.



PART NO.	RATING	MOUNTING CENTERS(")	LBS.	PRICE
P-T142	325-0-325V, 50MA	5V, 2A, 2.5VCT, 7.5A 2 x 2 $\frac{1}{4}$ (2 x 2 $\frac{1}{2}$)	3.5	\$74.50
P-T143	350-0-350V, 70 - 90MA*	5V, 3A, 2.5V, 7.5A, 2.5VCT, 3.5A2 $\frac{3}{16}$ x 2 $\frac{1}{2}$ (2 $\frac{1}{4}$ x 3 $\frac{1}{8}$)	4.6	\$74.50

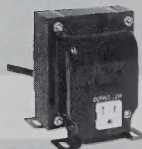
*Will provide 90MA if 5V winding is used with 2A rectifier.

Note: Feet for vertical mounting can be cut off to enable horizontal mounting. Mounting Centers in parentheses () apply to horizontal mounting.

LINE ISOLATION TRANSFORMERS

PART NO.	MFG.	VOLT-AMP RATING	MOUNTING CENTERS(")	LBS.	PRICE
P-TN-51X(While supplies last)	TRIAD	35	3 $\frac{1}{8}$, U-bracket	2.0	\$16.95
P-T169SS	HAMMOND	90	2 $\frac{1}{2}$ x 2 $\frac{3}{4}$, vert.	3.4	\$36.82
P-T169VS	HAMMOND	175	2 $\frac{1}{2}$ x 3 $\frac{1}{2}$, vert.	5.3	\$42.96

115 volt primary, 60 Hz., 115 volt secondary, must be hard wired.



171A/B

PART NO.	MFG.	VOLT-AMP RATING	MOUNTING CENTERS(")	LBS.	PRICE
P-T171A	HAMMOND	100	3 x 2 $\frac{5}{8}$	6.0	\$61.44
P-T171B	HAMMOND	200	3 x 4 $\frac{1}{8}$	8.1	\$74.30

115 volt primary, 50/60Hz., 115 volt secondary, vertical mounting with single outlet receptacle on case. With line cord.

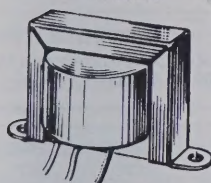
While supplies last

AUDIO INTERSTAGE TRANSFORMERS

PART NO.	DESCRIPTION	MAX. PRI. CURRENT	IMPEDANCE—OHMS PRI. TO SEC.	MOUNTING CENTERS(")	LBS.	PRICE
P-T20D89*	Push-Pull plate to push-pull grids.	40 MA	7,000 to 15,800	2 ³ / ₁₆	0.6	\$13.95
P-T124D	Push-Pull plate to push-pull grids. (25 Max DC bias)	40 MA	7,000 TO 15,800	2 ³ / ₁₆	0.7	\$13.95
P-T156	Equiv. to Stancor A53-C. 1:3 ratio overall. Center tapped secondary may be used for push-pull grids.	10 MA	10,000 to 90,000	2	0.4	\$14.95
P-T157	Same as above, only with nickel core for improved fidelity.	10 MA	10,000 to 90,000	2	0.4	\$15.95
P-T431	Coil assembly only for above (P-T156). Use your own iron to preserve mechanical fit. Coil window is 1/2" x 1/2".				0.2	\$12.95
P-T20A14*	Multi-purpose, center-tapped primary. Center-tapped secondary providing 1:15/1:3/1:6 ratio.	20 MA	15,000 to 135,000	2 ³ / ₁₆	1.0	\$27.95
P-T124E	Multi-purpose, center-tapped primary. Center-tapped secondary providing 1:15/1:3/1:6 ratio.	20 MA	15,000 to 135,000	2 ¹ / ₂	0.8	\$27.95

FILAMENT TRANSFORMERS115 V Primary,
50/60 Hz.
U-bracket mounting.

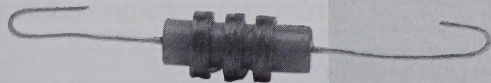
U-Bracket



PART NO.	MFG.	RATING	MOUNTING CENTERS(")	LBS.	PRICE
P-T166M2	HAMMOND	2.5VCT, 3A	2 ³ / ₁₆	0.8	\$11.95
P-T166Q2	HAMMOND	2.5VCT, 6A	2 ¹³ / ₁₆	1.0	\$16.24
P-T166S2	HAMMOND	2.5VCT, 10A	3 ¹ / ₁₆	1.8	\$18.95
P-T166L5	HAMMOND	5.0VCT, 2A	2 ³ / ₁₆	0.7	\$14.65
P-TF-7X (While supplies last)	TRIAD	5.0VCT, 3A	2 ¹³ / ₁₆	1.3	\$16.95
P-T166MS	HAMMOND	5.0VCT, 3A	2 ¹³ / ₁₆	1.3	\$16.95
P-TF-12X (While supplies last)	TRIAD	5.0VCT, 8A	4	2.2	\$22.50
P-T166RS	HAMMOND	5.0VCT, 8A	4	2.2	\$22.50
P-T166L6	HAMMOND	6.3VCT, 2A	2 ³ / ₁₆	0.8	\$14.63
P-T166N6	HAMMOND	6.3VCT, 4A	2 ¹³ / ₁₆	1.1	\$15.50
P-T166S6	HAMMOND	6.3VCT, 10A	3 ¹ / ₁₆	2.3	\$25.40
P-TF-70X (While supplies last)	TRIAD	12.6VCT, 1A	2 ¹³ / ₁₆	1.0	\$13.95
P-T166N12	HAMMOND	12.6VCT, 4A	3 ¹ / ₁₆	0.8	\$19.07
P-T167L12	HAMMOND	12.8VCT, 2.5A	1 ³ / ₄	1.3	\$20.67

FILTER CHOKES

PART NO.	MFG.	RATING	RESISTANCE (OHMS)	MOUNTING CENTERS(")	LBS.	PRICE
P-T156R	HAMMOND	1.5 Henries 200 MA	56	2 ³ / ₁₆ u-frame	0.7	\$10.20
P-T155H	HAMMOND	5 Henries 50 MA	270	2 u-frame	0.4	\$10.23
P-T158Q	HAMMOND	5 Henries 150 MA	105	2 ¹³ / ₁₆ u-frame	1.3	\$16.73
P-T193H	HAMMOND	5 Henries 200 MA	65	1 ¹¹ / ₁₆ x 2 vert.	2.5	\$24.70
P-T193L	HAMMOND	5 Henries 300 MA	57	2 ⁷ / ₁₆ x 2 ¹ / ₂ vert.	5.5	\$30.58
P-T193D	HAMMOND	8 Henries 150 MA	75	2 ¹ / ₂ x 2 ¹ / ₁₆ vert.	3.3	\$29.80
P-T157J	HAMMOND	10 Henries 65 MA	205	2 ¹³ / ₁₆ u-frame	1.0	\$18.32
P-TC-7X	TRIAD	10 Henries 90 MA	270	2 ¹³ / ₁₆ u-frame	1.4	\$12.50
P-T158M	HAMMOND	10 Henries 100 MA	195	2 ¹³ / ₁₆ u-frame	1.3	\$16.52
P-T193G	HAMMOND	10 Henries 150 MA	102	1 ¹⁵ / ₁₆ x 2 ¹ / ₂ vert.	4.3	\$43.94
P-T193J	HAMMOND	10 Henries 200 MA	82	2 ⁷ / ₁₆ x 2 ¹ / ₂ vert.	5.5	\$41.13
P-T193M	HAMMOND	10 Henries 300 MA	63	3 x 3 ⁵ / ₁₆ vert.	10.5	\$50.28
P-T193B	HAMMOND	12 Henries 100 MA	155	1 ¹¹ / ₁₆ x 2 vert.	2.5	\$24.68
P-T158L	HAMMOND	15 Henries 75 MA	411	2 ¹³ / ₁₆ u-frame	1.3	\$16.65
P-T193C	HAMMOND	20 Henries 100 MA	181	2 x 2 ¹ / ₁₆ vert.	3.3	\$29.84

**R.F. CHOKES (HAMMOND)**3 section windings on ferrite forms approx. 1 1/4" long by 5/16" over windings.
With axial leads 1 1/2" long.

2.5 mH	9 ohms	160 mA
5.0 mH	14 ohms	160 mA
10.0 mH	31 ohms	100 mA

PART NO.	PRICE
P-C1535B	\$3.40
P-C1535D	\$3.55
P-C1535G	\$3.88

LOWER PRICE**ROLLER INDUCTOR**

Offers truly continuous variation in inductance throughout its range. Literally any inductance between 0 and 28 μ H can be achieved, with a practical working resolution of 0.01 μ H. The plated copper busbar wire rests in a precision-machined helical groove cut into a solid cylinder of teflon-deirin polymer. This core rides on 12 carbon steel balls nested in the plate steel frames. The insulators on the rear frame are composed of virtually indestructible glass-based phenolic. Features a corner mounted wheel, coiled extension springs, and a positive wheel stop to prevent the wheel from leaving the coil. Quality built in the United States. 2.5 lbs, 8 1/2" long x 2 1/2" wide x 3" tall. **P-I001 \$95.00**

HOW TO ORDER RESISTORS

1. Determine the type of resistor you want. For example, carbon film, 1 watt. The part number begins with "R-B" for this type.

2 - Determine the ohm value you want. For example, 1K (1000 ohms).

3 - Order "R-B1K" in the package size you want. Example: R-B1K, 20pcs

CARBON FILM RESISTORS

Carbon film resistors are made by vacuum depositing a thin carbon film on a ceramic form. Available in 1/2 and 1 watt ratings. A good choice for applications which require a steady, low power drop.

- ±5% tolerance
- -55° C ~ 155° C operating range
- High stability
- Low noise
- Moisture stable
- EIA color coded
- High quality performance at economical price



		1/2 Watt .4" long x .14" dia.	
		350 V working, 700 V overload	
R-A(OHM)	Pkg/5	\$0.40	
	Pkg/20	\$1.00	
	Pkg/100	\$2.60	
		1 Watt .5" long x .14" dia.	
		500 V working, 1,000 V overload	
R-B(OHM)	Pkg/5	\$0.70	
	Pkg/ 20	\$2.20	
	Pkg/100	\$8.80	

1.0	27	270	2.0K	15K	200K
1.5	30	330	2.2K	20K	220K
2.0	33	390	2.4K	22K	270K
2.4	39	470	2.7K	27K	330K
2.7	47	510	3.0K	33K	470K
3.3	51	620	3.3K	39K	680K
4.7	68	680	3.9K	47K	820K
5.1	82	750	4.3K	51K	1.0M
6.8	100	820	4.7K	68K	1.5M
8.2	110	1.0K	5.1K	75K	2.0M
10	120	1.1K	6.2K	82K	3.0M
12	150	1.2K	6.8K	100K	4.7M
15	180	1.5K	7.5K	110K	6.8M
20	220	1.6K	8.2K	120K	8.2M
22	240	1.8K	10K	150K	

METAL OXIDE POWER RESISTORS

Metal Oxide resistors are for applications where stability under high temperature conditions is required. Available in 1 and 2 watt ratings.

- ±5% tolerance
- -55° C ~ 240° C operating range (derated over 70° C)
- 350 V working, 600 V overload
- Excellent flame retardant coating
- Stable performance is diverse conditions
- High purity ceramic core
- EIA color coded



		1 Watt .47" long x .20" dia.				2 Watt .63" long x .22" dia.	
R-E(OHM)	Pkg/5	\$0.65		R-F(OHM)	Pkg/5	\$0.95	
	Pkg/20	\$2.20			Pkg/ 20	\$3.20	
	Pkg/100	\$9.00			Pkg/100	\$12.00	

CARBON COMPOSITION RESISTORS

Carbon composition resistors are made by mixing carbon particles which are mixed with a binder molded into a cylindrical shape and then baked. The resistance decreases as the temperature increases. Resistance more prone to drifting than with other types. Available in 1/2 watt ratings. Standard "classic" resistor. .38" long x .14" dia.

- ±5% tolerance
- -55° C ~ 125° C operating range
- 350 V working, 700 V overload
- Low inductance
- Low capacitance
- Better pulse endurance characteristics than film type resistors
- EIA color coded



		Below 1 meg ohm				1 meg ohm and above	
R-I(OHM)	Pkg/5	\$1.00		R-J(OHM)	Pkg/5	\$1.60	
	Pkg/20	\$3.00			Pkg/ 20	\$4.80	

2.7	82	680	6.2K	75K	750K
3.0	100	750	6.8K	82K	820K
3.9	110	820	7.5K	100K	1.0M
4.7	120	1.0K	8.2K	110K	1.2M
5.1	150	1.1K	10K	120K	1.5M
6.8	180	1.2K	15K	150K	2.2M
8.2	220	1.5K	20K	200K	2.4M
10	240	1.8K	22K	220K	2.7M
15	270	2.2K	27K	270K	3.3M
20	330	2.4K	33K	330K	4.7M
27	360	2.7K	39K	390K	5.6M
36	390	3.3K	47K	470K	6.8M
47	470	3.6K	51K	510K	8.2M
51	510	4.7K	62K	620K	
68	620	5.1K	68K	680K	

METAL FILM RESISTORS

Metal film resistors consist of a resistive element of an extremely thin layer of metal alloy vacuum deposited on a substrate. Precise and quiet. Available in 1/2 watt rating. .4" long x .14" dia.

- ±1% tolerance
- -55° C ~ 155° C operating range
- 350 V working, 700 V overload
- Epoxy coated
- Nickel chromium ceramic substrate
- Alloy coated leads
- Welded end caps
- EIA color coded



R-M(OHM)	Pkg/5	\$0.60
	Pkg/20	\$1.80
	Pkg/100	\$6.80

10	120	680	5.1K	47K	240K
12	150	820	6.2K	51K	270K
15	180	1.0K	6.8K	62K	330K
20	220	1.1K	7.5K	68K	470K
27	240	1.2K	8.2K	75K	511K
36	270	1.5K	10K	82K	680K
47	330	2.2K	15K	100K	820K
51	360	2.4K	20K	110K	1.0M
68	390	2.7K	22K	120K	1.5M
82	470	3.3K	27K	150K	2.2M
100	510	3.9K	33K	200K	
110	620	4.7K	39K	220K	

POWER RESISTORS

Wire wound resistors are made by wrapping a length of high resistance wire onto an insulating form. Metal oxide resistors are made by depositing tin oxide on the substrate, providing good stability. Ceramic flame retardant package. Exceptionally small, sturdy and reliable. Available in 5 watt and 10 watt ratings.

- ±5% tolerance
- -55° C ~ 155° C operating range
- 350 V working, 700 V overload
- Sealed with special cement
- Excellent moisture resistance
- High Temperature Stability

	Wire Wound	Metal Oxide
5W	0.5-47	50-25K
10W	0.5-750	1.0K-25K

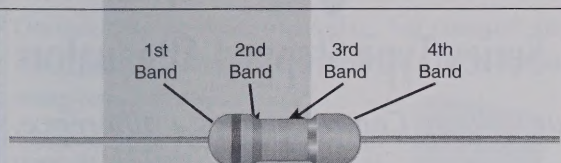
		5 Watt .86" long x .39" square	
		Each	\$0.40
R-Q(OHM)	Pkg/10	\$3.50	
		10 Watt 1.93" long x .39" square	
		Each	\$0.55
R-R(OHM)	Pkg/10	\$4.50	



0.5	20	200	2.7K
1	30	250	3.0K
2	47	300	4.7K
3	50	400	5.0K
4	75	500	10K
5	100	750	20K
7.5	110	1.0K	25K
10	120	1.5K	
15	150	2.0K	

HOW TO "READ" A RESISTOR

Most resistors are color coded with multiple bands to identify the resistance value and the tolerance. While actually measuring the resistance of a resistor before using it is a good idea, it's also a good idea to know what the resistance is suppose to be. Resistors (especially carbon composition) can drift in their actual resistance. Keep a stock of fresh resistors on hand. Use the following Standard EIA color code tables to identify resistors.



4 band: $\pm 2\%$, $\pm 5\%$ and $\pm 10\%$ tolerance

Color	1st band (1st figure)	2nd band (2nd figure)	3rd band (multiplier)	4th band (tolerance)
Black	0	0	10^0	
Brown	1	1	10^1	
Red	2	2	10^2	$\pm 2\%$
Orange	3	3	10^3	
Yellow	4	4	10^4	
Green	5	5	10^5	
Blue	6	6	10^6	
Violet	7	7	10^7	
Gray	8	8	10^8	
White	9	9	10^9	
Gold			10^{-1}	$\pm 5\%$
Silver			10^{-2}	$\pm 10\%$

See page 37 for
electronic color
code chart!

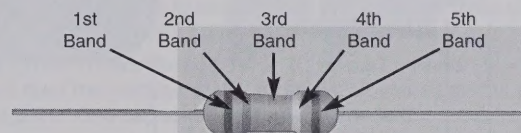


POWER RESISTOR

15k ohm, 7
watt, 10%
tolerance.
Perfect for
plate load
resistor for
6L6GC
tubes. Grab
a handful.
While sup-
plies last.

R-BAGO-01

20 pieces \$1.00



5 band: $\pm 1\%$, $\pm 25\%$, $\pm 5\%$ and $\pm 1\%$ tolerance

Color	1st band (1st figure)	2nd band (2nd figure)	3rd band (3rd figure)	4th band (multiplier)	5th band (tolerance)
Black	0	0	0	10^0	
Brown	1	1	1	10^1	$\pm 1\%$
Red	2	2	2	10^2	
Orange	3	3	3	10^3	
Yellow	4	4	4	10^4	
Green	5	5	5	10^5	$\pm 0.5\%$
Blue	6	6	6	10^6	$\pm 0.25\%$
Violet	7	7	7	10^7	$\pm 0.1\%$
Gray	8	8	8	10^8	
White	9	9	9	10^9	
Gold				10^{-1}	
Silver				10^{-2}	

NEW STOCK POTENTIOMETERS

24 mm carbon composition. 300° rotation. $\frac{1}{2}$ watt, 500VDC rating for linear taper, $\frac{1}{4}$ watt, 250VDC rating for audio taper. $\frac{1}{8}$ " dia. shaft. Solder lugs.

SINGLE POTS

PART NO.	VALUE	TAPER	PRICE
R-V5K	5K	audio	\$1.75
R-V10K	10K	audio	\$1.75
R-V100K	100K	linear	\$1.75
R-V500K	500K	audio	\$1.75
R-V1M	1M	audio	\$1.75

DUAL POTS

PART NO.	VALUE	TAPER	PRICE
R-V10KD1	10K	audio	\$2.75
R-V50KD1	50K	audio	\$2.75
R-V50KD2	50K	linear	\$2.75
R-V100KD1	100K	audio	\$2.75
R-V100KD2	100K	linear	\$2.75
R-V250KD1	250K	audio	\$2.75
R-V250KD2	250K	linear	\$2.75
R-V500KD1	500K	audio	\$2.75
R-V500KD2	500K	linear	\$2.75
R-V1MD1	1M	linear	\$2.75
R-V1MD2	1M	audio	\$2.75

SURPLUS POTENTIOMETERS

Carbon composition surplus pots. $\pm 30\%$ of values shown. Limited supply.

PART NO.	VALUE (Ohms)	TAPER	SHAFT	OTHER	PRICE
R-V501	50	linear	screwdriver	5W Clarostat NIB	\$6.95
R-V5001	500	linear	$\frac{1}{4}$ " flatted plastic		\$1.00
R-V1K	1K	linear		SW	\$4.50
R-V1D5K1	1.5K	audio	$\frac{1}{4}$ " flat	switch	\$1.00
R-V2K-L-SW	2K	linear	$\frac{1}{4}$ " round	switch	\$1.00
R-V350	2K	audio	$\frac{1}{4}$ " round	switch	\$2.00
R-V5K2	5K	linear	$\frac{1}{8}$ " flat	min.	\$1.00
R-V5K3	5K	audio	$\frac{1}{4}$ " round	1W, switch	\$1.00
R-V5K4	5K	audio	$\frac{1}{4}$ " x 2"	2W Clarostat	\$2.65
R-V15K	15K	linear	$\frac{1}{4}$ " flatted; $\frac{3}{8}$ " long	25W	\$8.00
R-V351	25K	audio	$\frac{1}{4}$ " round		\$3.75
R-V25K1	25K	linear	$\frac{1}{4}$ " round	switch	\$1.00
R-V25K2	25K	linear	$\frac{1}{4}$ " knurl		\$1.00
R-V25K3	25K	audio	$\frac{1}{8}$ " flat	min.	\$1.00
R-V25K4	25K	audio	$\frac{1}{4}$ " dial	PC mount, switch	\$1.00
R-V50KD4	50K	audio	$\frac{1}{4}$ " & $\frac{1}{8}$ "	dual control	\$1.00
R-VT50K1	50K		screwdriver	horz trim pot, pc mount	\$1.00
R-V100KD4	100K	audio	$\frac{1}{4}$ " & $\frac{1}{8}$ "	dual control	\$1.00
R-V500K2	500K	linear	$\frac{1}{4}$ " plastic knurled	pc mount	\$1.00
R-V500KD3	500K	audio	$\frac{1}{4}$ " round	dual, switch	\$2.50
R-V500KD4	500K		$\frac{1}{4}$ " inner, $\frac{3}{8}$ " outer	dual	\$2.50
R-V1M2	1M	linear			\$1.95
R-V2MD	2.5M	linear	$\frac{1}{4}$ " inner, $\frac{3}{8}$ " outer	dual, switch, tap	\$2.00
R-V2MD1	2M	audio	$\frac{1}{4}$ " flat	dual	\$2.00
R-V5M1	5M	linear	$\frac{1}{4}$ " plastic knurled	pc mount	\$1.00

CLAROSTAT REPLACEMENT POTS

"Pick-A-Shaft" controls take any shaft listed below. $\frac{1}{8}$ " dia. body with $\frac{3}{8}$ " x 32 mounting bushing $\frac{3}{8}$ " long. May be equipped with switches listed below. Order by # R-VA47 followed by resistance value and curve letter. "S" is linear. "Z" is audio taper. 0.5 watt.

RESISTANCE VALUES AND TAPER

1000-S	10K-Z	100K-S	500K-Z
5000-S	25K-S	100K-Z	1 MEG-S
10K-S	50K-S	500K-S	1 MEG-Z
2 MEG-S			

R-VA47-(OHM) \$8.95

WIREWOUND POTS

Clarostat 4 watt wirewound "Pick-A-Shaft" controls, $1\frac{23}{32}$ " dia. body with $\frac{3}{8}$ " x 32 mounting bushing. Linear Taper.

RESISTANCE VALUES

2K, 5K, 10K ohms

R-VA58-(OHM)

\$21.95

SHAFTS FOR R-A47/R-A58 POTS

R-VRS-2	Round, 2"
R-VRS-3	Round, 3"
R-VKSS-3	Knurled Split, 3"
R-VFS-3	Flatted, 3"
R-VKFS-3	Knurled Flatted, 3"

\$2.95 ea.

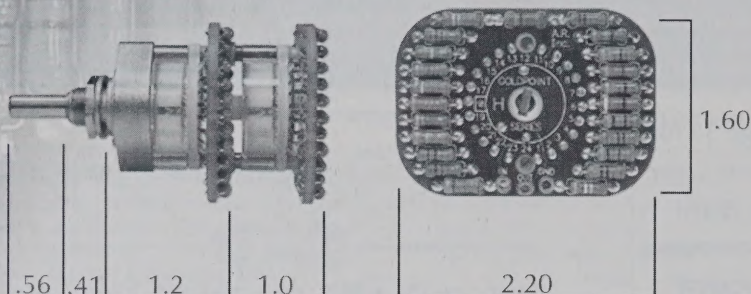
SWITCHES FOR R-VA47 POTS

R-VSWE-10	SPST 3A-125V	\$5.25
R-VSWE-20	DPST 3A-125V	\$5.25

BAG 'O RESISTORS

Refill your miscellaneous resistor drawer. A minimum of 100 assorted resistors, mostly NOS carbon composition. Due to age, values have drifted, so have your ohm meter ready!

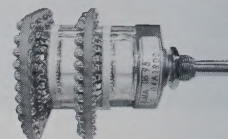
R-BAGO \$2.50



goldpointTM

Available fully assembled or in kit form using 1%, metal film Roderstein resistors, or with switch only, you install your favorite brand of resistor. All types use ELMA switch components, and are ideal for Pro Audio and custom applications. These attenuators can directly replace potentiometers (fit and function) in most volume control applications 1/2 W rating.

	Mono		Stereo	
	Part #	Price	Part #	Price
Assembled	R-VATAM-value	\$91.00	R-VATAS-value	\$167.00
Kit	R-VATKM-value	\$76.00	R-VATKS-value	\$139.00
Switch only	R-VATSM	\$70.00	R-VATSS	\$127.00



Series Type Stepped Attenuators

Your Volume Control makes a difference.

Use a volume control designed to enhance the performance of your audio system.

Low noise • 24 Position stepped Attenuator

Precision Control • Long Lasting Contacts •

10K - 25K - 50K - 100K values

250V - Dielectric Constant: 2.2K, non-polar dielectric

Self Inductance: Less than 12nH with 6 mm leads

Insulation Resistance: More than 100,000 Meg Ohms @ 20°C

Temperature Coefficient: -200 x 10⁻⁶/°C

Temperature Range: -25°C to +85°C

Test Voltage: 2.5 x Vr for 2 seconds

Rated Voltage: Vdc/400Vac

630V - Dielectric Absorption Factor: Less than .05% @ 20°C

Dielectric Thickness: 630Volt = 6µm, 250Volt = 4µm

Metal Layers Thickness: 630Volt = 0.02µm, 250Volt = 0.03µm

Metal Layers Conductivity: 630Volt = 2-4 Ohm/cm², 250Volt = 1.5-3 Ohm/cm²

250 VOLT

Part #	Mfd	Size(mm)	Price
C-FT1-250	1.0	11 x 21	\$1.90
C-FT1D5-250	1.5	12 x 22	\$2.20
C-FT2D2-250	2.2	14 x 22	\$2.45
C-FT3D3-250	3.3	16 x 25	\$2.70
C-FT4D7-250	4.7	18 x 27	\$3.05
C-FT5D1-250	5.1	19 x 27	\$3.10
C-FT6D8-250	6.8	20 x 30	\$3.55
C-FT8D2-250	8.2	21 x 33	\$4.50
C-FT10-250	10	23 x 33	\$5.00
C-FT15-250	15	25 x 38	\$6.45
C-FT22-250	22	28 x 43	\$8.65
C-FT39-250	39	34 x 48	\$13.90
C-FT47-250	47	38 x 48	\$16.90
C-FT56-250	56	39 x 53	\$19.35
C-FT68-250	68	41 x 58	\$22.55
C-FT82-250	82	45 x 58	\$26.95

630 VOLT

Part #	Mfd	Size(mm)	Price
C-FSD1-630	0.1	9 x 17	\$1.65
C-FSD15-630	0.15	9 x 20	\$1.70
C-FSD18-630	0.18	10 x 20	\$1.70
C-FSD22-630	0.22	11 x 20	\$1.75
C-FSD27-630	0.27	11 x 22	\$1.75
C-FSD33-630	0.33	12 x 22	\$1.80
C-FSD39-630	0.39	12 x 22	\$1.85
C-FSD47-630	0.47	13 x 22	\$1.90
C-FSD56-630	0.56	14 x 22	\$1.95
C-FSD68-630	0.68	15 x 22	\$2.00
C-FSD82-630	0.82	15 x 25	\$2.10
C-FS1-630	1.0	16 x 25	\$2.20
C-FS1D5-630	1.5	18 x 27	\$2.60
C-FS2D2-630	2.2	19 x 33	\$2.90
C-FS3D3-630	3.3	24 x 33	\$3.25
C-FS4D7-630	4.7	25 x 38	\$3.90
C-FS5D6-630	5.6	28 x 38	\$4.20
C-FS6D8-630	6.8	30 x 38	\$4.75
C-FS8D2-630	8.2	30 x 45	\$5.60
C-FS10-630	10	32 x 45	\$6.30
C-FS15-630	15	36 x 53	\$8.10
C-FS22-630	22	42 x 58	\$10.85
C-FS33-630	33	49 x 63	\$14.60
C-FS39-630	39	53 x 63	\$16.60
C-FS47-630	47	54 x 72	\$19.30

SPRAGUE ATOMS CAPS

Features: Low leakage current • Long shelf life • Ideal for applications in TV sets, auto radios, radio-phone combinations, and electronic testing equipment

Operating Temperature

-40°C to +85°C (6WVDC-100WVDC)

-20°C to +85°C (101WVDC-600WVDC)



Part #	d x l (")	Mfd	Voltage	1-49	50+
C-SA25-25	1/2 x 1/4	25	25	\$0.89	\$0.79
C-SA250-25	3/8 x 15/16	250	25	\$1.40	\$1.05
C-SA25-50	1/4 x 11/16	25	50	\$1.00	\$0.75
C-SA50-50	5/16 x 13/16	50	50	\$1.00	\$0.75
C-SA100-100	7/16 x 1 1/2	100	100	\$1.85	\$1.39
C-SA8-150	3/8 x 13/16	8	150	\$1.33	\$1.00
C-SA10-150	3/8 x 13/16	10	150	\$1.25	\$0.94
C-SA100-350	1 x 2 5/8	100	350	\$4.95	\$3.72
C-SA16-475	1 5/8 x 7/8	16	475	\$3.60	\$2.70
C-SA8-450	15/32 x 1 3/4	8	450	\$2.36	\$1.77
C-SA80-450	1 x 2 5/8	80	450	\$5.70	\$4.30
C-SA100-450	3 1/4 x 1 1/4	100	450	\$6.50	\$4.88
C-SA20-500	7/8 x 2 1/4	20	500	\$3.60	\$2.70
C-SA40-500	1 x 2 3/8	40	500	\$5.10	\$3.90
C-SA20-600	1 x 3 5/8	20	600	\$7.30	\$5.50

**SOLEN
FAST
CAPACITORS**

WIMA

Designed for pc board mounting, but compact size and rectangular shape make them ideal for mounting using terminal strips.

Tolerance $\pm 5\%$, operating temperature range -55° to $+100^\circ$. All values have $\frac{1}{4}$ " lead length.



MKP4-Metalized polypropylene capacitors for stringent requirements

PART NO.	LEAD SPACING	PRICE
C-W4D01-400	7.50 mm	\$0.63
C-W4D015-400	7.50 mm	\$0.66
C-W4D022-400	10.0 mm	\$0.72
C-W4D033-400	10.0 mm	\$0.77
C-W4D047-400	10.0 mm	\$0.84
C-W4D068-400	10.0 mm	\$0.93
C-W4D1-400	15.0 mm	\$1.04
C-W4D15-400	15.0 mm	\$1.17
C-W4D22-400	15.0 mm	\$1.40
C-W4D33-400	22.5 mm	\$2.12
C-W4D47-400	22.5 mm	\$2.50
C-W4D68-400	22.5 mm	\$3.04
C-W41-400	27.5 mm	\$3.83

C-W4D01-630	10.0 mm	\$0.72
C-W4D015-630	10.0 mm	\$0.73
C-W4D022-630	10.0 mm	\$0.75
C-W4D033-630	10.0 mm	\$0.84
C-W4D047-630	10.0 mm	\$0.92
C-W4D068-630	15.0 mm	\$1.10
C-W4D1-630	15.0 mm	\$1.24
C-W4D15-630	15.0 mm	\$1.51
C-W4D22-630	22.5 mm	\$2.30
C-W4D33-630	22.5 mm	\$2.75
C-W4D47-630	22.5 mm	\$3.08
C-W4D68-630	27.5 mm	\$4.12
C-W41-630	27.5 mm	\$5.29

MKP 10-High reliability polypropylene capacitors for pulse applications

C-W10D01-400	10.0 mm	\$0.79
C-W10D015-400	10.0 mm	\$0.86
C-W10D022-400	10.0 mm	\$0.93
C-W10D033-400	10.0 mm	\$1.02
C-W10D047-400	15.0 mm	\$1.06
C-W10D068-400	15.0 mm	\$1.15
C-W10D1-400	15.0 mm	\$1.26
C-W10D15-400	15.0 mm	\$1.83
C-W10D22-400	22.5 mm	\$2.30
C-W10D33-400	22.5 mm	\$2.77
C-W10D47-400	22.5 mm	\$3.15
C-W10D68-400	27.5 mm	\$4.50
C-W101-400	27.5 mm	\$6.42

C-W10D01-630	10.0 mm	\$0.84
C-W10D015-630	10.0 mm	\$0.99
C-W10D022-630	15.0 mm	\$1.29
C-W10D033-630	10.0 mm	\$1.69
C-W10D047-630	10.0 mm	\$2.07
C-W10D068-630	15.0 mm	\$2.46
C-W10D1-630	22.5 mm	\$3.09
C-W10D15-630	22.5 mm	\$3.51
C-W10D22-630	27.5 mm	\$4.98
C-W10D33-630	27.5 mm	\$6.28
C-W10D47-630	27.5 mm	\$8.06
C-W10D68-630	27.5 mm	\$10.08
C-W101-630	37.5 mm	\$12.94

When ordering capacitors you want to look for three things, the type of capacitor, the capacity (micro or pico farads) and the voltage rating. Our capacitor part numbers

read per the following example:

C-TD01-400

Capacitor - Tubular,
Metalized Polyester

Capacity - micro or pico farads,
D is decimal point (0.01)

Voltage rating (400 VDC)

Unless noted, capacity is given in microfarads (mF). If the part number has just the micro or pico farads listed then the voltage is the same for all values and is listed in the description of the part. One capacitor that is like this is the silver mica.

METALIZED POLYESTER TUBULAR CAPACITORS

Tolerance $\pm 10\%$, non-inductive, self healing windings, axial leads.



PART NO.	DIA. (")	LENGTH (")	1-9	10-49	50+
C-TD01-400	0.22	0.55	\$0.34	\$0.30	\$0.25
C-TD015-400	0.22	0.55	\$0.34	\$0.30	\$0.25
C-TD022-400	0.22	0.55	\$0.34	\$0.30	\$0.25
C-TD033-400	0.24	0.55	\$0.34	\$0.30	\$0.25
C-TD047-400	0.28	0.55	\$0.39	\$0.35	\$0.30
C-TD068-400	0.26	0.75	\$0.39	\$0.35	\$0.30
C-TD1-400	0.30	0.75	\$0.44	\$0.39	\$0.34
C-TD15-400	0.33	0.75	\$0.49	\$0.44	\$0.38
C-TD22-400	0.39	0.75	\$0.56	\$0.50	\$0.42
C-TD33-400	0.39	0.98	\$0.60	\$0.54	\$0.44
C-TD47-400	0.45	0.98	\$0.61	\$0.55	\$0.46
C-TD68-400	0.51	1.26	\$0.88	\$0.79	\$0.67
C-T1-400	0.59	1.26	\$1.00	\$0.90	\$0.76
C-T2D2-400	0.79	1.26	\$1.93	\$1.73	\$1.47
C-TD001-630	0.18	0.39	\$0.42	\$0.37	\$0.32
C-TD0015-630	0.18	0.39	\$0.42	\$0.37	\$0.32
C-TD0022-630	0.18	0.39	\$0.42	\$0.37	\$0.32
C-TD0033-630	0.18	0.39	\$0.42	\$0.37	\$0.32
C-TD0047-630	0.18	0.39	\$0.42	\$0.37	\$0.32
C-TD0068-630	0.18	0.39	\$0.42	\$0.37	\$0.32
C-TD01-630	0.24	0.55	\$0.39	\$0.35	\$0.30
C-TD015-630	0.26	0.55	\$0.39	\$0.35	\$0.30
C-TD022-630	0.26	0.55	\$0.41	\$0.36	\$0.32
C-TD033-630	0.26	0.75	\$0.43	\$0.38	\$0.33
C-TD047-630	0.30	0.75	\$0.48	\$0.43	\$0.37
C-TD068-630	0.33	0.75	\$0.54	\$0.48	\$0.40
C-TD1-630	0.39	0.75	\$0.61	\$0.54	\$0.46
C-TD15-630	0.43	0.75	\$0.66	\$0.59	\$0.50
C-TD22-630	0.43	0.98	\$0.71	\$0.63	\$0.55
C-TD33-630	0.47	0.98	\$0.83	\$0.74	\$0.63
C-TD47-630	0.51	1.26	\$0.93	\$0.83	\$0.71
C-TD68-630	0.59	1.26	\$1.08	\$0.97	\$0.82
C-T1-630	0.67	1.26	\$1.38	\$1.24	\$1.05
C-T1D5-630	0.75	1.26	\$1.88	\$1.69	\$1.43
C-T2D2-630	0.79	1.85	\$2.43	\$2.18	\$1.85

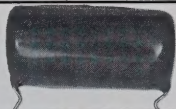
METALIZED POLYPROPYLENE TUBULAR CAPACITORS

Tolerance $\pm 10\%$, $+105^\circ\text{C}$, non-inductive, self healing windings, axial leads.

PART NO.	DIA. (")	LENGTH (")	1-49	50+
C-UD001-630	0.25	0.58	\$0.67	\$0.50
C-UD0015-630	0.25	0.58	\$0.76	\$0.57
C-UD0022-630	0.25	0.58	\$0.70	\$0.53
C-UD0033-630	0.25	0.58	\$0.82	\$0.62
C-UD0047-630	0.25	0.58	\$0.83	\$0.63
C-UD0068-630	0.25	0.58	\$0.69	\$0.52
C-UD0082-630	0.25	0.58	\$0.67	\$0.50
C-UD01-630	0.26	0.58	\$0.48	\$0.36
C-UD015-630	0.30	0.58	\$0.50	\$0.37
C-UD022-630	0.34	0.58	\$0.57	\$0.43
C-UD033-630	0.34	0.81	\$0.82	\$0.62
C-UD047-630	0.36	0.81	\$0.80	\$0.60
C-UD068-630	0.36	1.15	\$0.93	\$0.70
C-UD1-630	0.42	1.15	\$0.79	\$0.59
C-UD15-630	0.48	1.15	\$1.20	\$0.90
C-UD22-630	0.50	1.34	\$1.22	\$0.91
C-UD33-630	0.61	1.34	\$1.58	\$1.19
C-UD47-630	0.71	1.34	\$1.82	\$1.36
C-UD68-630	0.97	1.34	\$2.59	\$1.94

SBE "ORANGE DROP" CAPACITORS

Rated for 85° C operation. Radial leads.

**Type 715P - Polypropylene Film ± 5% tolerance**

PART NO.	DIA. (")	LENGTH (")	1-49	50+
C-RD001-600	0.40	0.75	\$0.47	\$0.36
C-RD0022-600	0.40	0.75	\$0.47	\$0.36
C-RD0033-600	0.40	0.75	\$0.47	\$0.36
C-RD0047-600	0.45	0.75	\$0.47	\$0.36
C-RD0056-600	0.45	0.75	\$0.59	\$0.45
C-RD01-600	0.45	0.95	\$0.59	\$0.45
C-RD015-600	0.50	0.95	\$0.60	\$0.46
C-RD022-600	0.55	0.95	\$0.62	\$0.47
C-RD033-600	0.55	1.30	\$0.81	\$0.62
C-RD047-600	0.60	1.30	\$0.77	\$0.59
C-RD1-600	0.75	1.30	\$1.22	\$0.93
C-RD22-600	0.85	1.70	\$2.03	\$1.56

Type PS - Polyester Film 600V, ± 10% tolerance

PART NO.	DIA. (")	LENGTH (")	1-9	10-49	50+
C-SD0012-600	0.33	0.70	\$0.57	\$0.51	\$0.43
C-SD0015-600	0.33	0.70	\$0.57	\$0.51	\$0.43
C-SD0018-600	0.33	0.70	\$0.57	\$0.51	\$0.43
C-SD002-600	0.33	0.70	\$0.57	\$0.51	\$0.43
C-SD0025-600	0.35	0.70	\$0.57	\$0.51	\$0.43
C-SD0027-600	0.35	0.70	\$0.57	\$0.51	\$0.43
C-SD003-600	0.35	0.70	\$0.57	\$0.51	\$0.43
C-SD0033-600	0.35	0.70	\$0.57	\$0.51	\$0.43
C-SD004-600	0.38	0.70	\$0.59	\$0.53	\$0.44
C-SD005-600	0.38	0.70	\$0.60	\$0.54	\$0.45
C-SD0056-600	0.40	0.70	\$0.60	\$0.54	\$0.45
C-SD006-600	0.40	0.70	\$0.60	\$0.54	\$0.45
C-SD0068-600	0.40	0.70	\$0.60	\$0.54	\$0.45
C-SD0075-600	0.40	0.70	\$0.65	\$0.58	\$0.49
C-SD008-600	0.40	0.90	\$0.65	\$0.58	\$0.49
C-SD0082-600	0.40	0.90	\$0.65	\$0.58	\$0.49
C-SD01-600	0.40	0.90	\$0.65	\$0.58	\$0.49
C-SD015-600	0.40	0.90	\$0.74	\$0.66	\$0.56
C-SD02-600	0.45	0.90	\$0.80	\$0.72	\$0.60
C-SD025-600	0.45	0.90	\$1.19	\$1.07	\$0.89
C-SD03-600	0.45	1.20	\$1.19	\$1.07	\$0.89
C-SD033-600	0.45	1.20	\$1.19	\$1.07	\$0.89
C-SD04-600	0.55	1.20	\$1.19	\$1.07	\$0.89
C-SD05-600	0.55	1.20	\$1.28	\$1.15	\$0.96
C-SD056-600	0.60	1.20	\$1.28	\$1.15	\$0.96
C-SD06-600	0.60	1.20	\$1.28	\$1.15	\$0.96
C-SD068-600	0.60	1.20	\$1.28	\$1.15	\$0.96
C-SD075-600	0.60	1.20	\$1.40	\$1.26	\$1.05
C-SD082-600	0.65	1.20	\$1.40	\$1.26	\$1.05
C-SD1-600	0.65	1.20	\$1.40	\$1.26	\$1.05
C-SD15-600	0.70	1.60	\$1.97	\$1.77	\$1.47
C-SD2-600	0.80	1.60	\$2.74	\$2.46	\$2.05
C-SD22-600	0.80	1.60	\$2.94	\$2.64	\$2.18
C-SD25-600	0.80	1.60	\$2.96	\$2.66	\$2.20
C-SD33-600	0.89	1.81	\$3.66	\$3.29	\$2.74

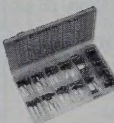
Type PS - Polypropylene Film 1600V, ± 10% tolerance

PART NO.	DIA. (")	LENGTH (")	PRICE
C-SD001-1600	0.50	1.30	\$0.85
C-SD002-1600	0.50	1.30	\$0.85
C-SD003-1600	0.50	1.30	\$0.85
C-SD0039-1600	0.50	1.30	\$0.85
C-SD005-1600	0.50	1.30	\$0.85
C-SD006-1600	0.55	1.30	\$0.98
C-SD0068-1600	0.55	1.30	\$0.98
C-SD01-1600	0.60	1.30	\$1.15
C-SD02-1600	0.65	1.70	\$1.64
C-SD03-1600	0.75	1.70	\$1.70
C-SD05-1600	0.85	1.70	\$2.21

SBE 716P HIGH PERFORMANCE "ORANGE DROP" CAPACITORS

The Type 716P Orange Drop is a high performance version of the popular 715P series. They are made from polypropylene film and foil with pure copper leads, making them ideal for high pulse current applications. Rated for 85° C operation. ±10% tolerance. Straight radial leads with 1/2" spacing, minimum 1/2" length.

PART NO.	PRICE	PART NO.	PRICE
C-PD0047-400	\$0.78	C-PD001-600	\$0.78
C-PD0056-400	\$0.79	C-PD0022-600	\$0.78
C-PD01-400	\$0.82	C-PD0033-600	\$0.79
C-PD015-400	\$0.83	C-PD0047-600	\$0.81
C-PD022-400	\$0.98	C-PD0056-600	\$0.82
C-PD033-400	\$1.06	C-PD01-600	\$0.86
C-PD047-400	\$1.12	C-PD015-600	\$1.00
C-PD1-400	\$1.30	C-PD022-600	\$1.09
C-PD22-400	\$1.62	C-PD033-600	\$1.19
C-PD33-400	\$1.98	C-PD047-600	\$1.25
C-PD47-400	\$2.34	C-PD1-600	\$1.75
		C-PD22-600	\$2.25

**ORANGE DROP CAPACITOR KIT**

6 of each of the following values in the Type PS (600V, polyester) and Type 715P (600V, polypropylene), 72 pieces total. Save over purchasing individually, and you get a sturdy plastic case. .0033, .0056, .01, .022, .047 and .1 µF. C-RS1 \$49.50

MISCELLANEOUS ORANGE DROPS

C-SD0022-1000	.0022 µF, 1000 V	\$0.55
C-SD0033-800	.0033 µF, 800 V	\$0.25
C-SD0047-800	.0047 µF, 800 V	\$0.25
C-SD0082-1600	.0082 µF, 1600 V	\$0.83

ORANGE DROP NOTES

Why use Film/Foil Capacitors? Film/Foil capacitors are used rather than ceramic, tantalum or aluminum electrolytic types when capacitance stability, high pulse current and/or dissipation factor (heat loss) are of concern. Film/Foil capacitors are manufactured with capacitance values less than 1.0 microfarad and tolerances ranging from 1% to 10%.

In comparison to other types of capacitors, Film/Foil designs offer: High insulation resistance, excellent pulse and current carrying capability, low dissipation factor, capacitance stability, low dielectric Absorption, high pulse rise time (dv/dt), non-polarized and high frequency performance.

What is the difference between Film/Foil and metalized film capacitors? Film/Foil capacitors consist of two plates of aluminum foil, which act as the electrodes, separated by a film used as the dielectric. These materials are non-inductively wound to form the capacitor section. The wire leads are welded directly to the aluminum foil which extends out on both sides of the capacitor section, hence the term extended foil design. In order to provide the utmost in dependability a sufficient thickness of dielectric film is essential. This construction criteria is the primary reason why the physical dimensions of Film/Foil capacitors are larger than that of the metalized types.

In contrast to the Film/Foil capacitor, where the electrode is an independent layer of aluminum foil, the electrode for the metalized film capacitor is an extremely thin layer of metal which is vacuum-deposited directly onto the dielectric film. The wire lead is connected to the electrodes by means of a metal spray applied to each end of the capacitor section; the lead is welded to this metal end spray. Metalized film capacitors are manufactured using a thinner dielectric film than that which is used in the same rated Film/Foil design. This is possible due to the self-healing characteristics of the metalized film. Self-healing or clearing removes a fault or short circuit in the dielectric film by vaporizing the metal electrode surrounding the defect and isolating the area.

HOW TO "READ" ORANGE DROP CAPACITORS

SBE6PS-P22
224K600V 9644

Need to determine the value of an Orange Drop cap? Use the following code to determine it's value.

MFG. PART NO

224 = capacitance in pico farads
1st 2 digits are significant digits, 3rd digit is number of digits that follow (22+0000 = 220,000 pF) = .22 µF

K = tolerance
F = 1%, J = 5%
K = 10%

600V = voltage rating
9644 = date code
44th week of 1996

NEW MANUFACTURE - FP TYPE CAPS

These high voltage, electrolytic can capacitors, also known as "twist-lock" or "FP" capacitors, represent a bygone era of the radio, TV and early electronics industry, and combine the convenience of multi-section design with easy mounting. Though some Aero M stock is still available, we are pleased to announce the long-term availability of these products through CE Manufacturing, LLC. With the transfer of FP capacitor manufacturing equipment, (much of it built by Mallory, the inventor of the FP type), to CE Manufacturing LLC, customers can be assured of a quality American-made product without the fear of obsolescence. These capacitors are especially applicable to new designs in the growing market of vacuum-tube audio and musical equipment manufacturing as well as in the industrial electronics industry. CE Manufacturing is a division of Campanella Enterprises which also owns Antique Electronic Supply, and CE Distribution.

PART NO.	CAPACITY@VOLTS	SIZE (")	PRICE
C-EC20-20-450	20/20@450	1 x 2	\$19.95
C-EC20-20-20	20/20@450, 20@25	1 x 2 1/2	\$20.95
C-EC40-40-20-20	40/40/20/20@450	1 1/2 x 3 1/2	\$27.95
C-EC20X4-475	20/20/20/20@475	1 1/2 x 2	\$24.95
C-EC40-20X3	40/20/20/20@500	1 1/2 x 2 1/2	\$25.95
C-EC100-100-500	100/100@500	1 1/2 x 4	\$24.95
C-EC40X3-525	40/40/40@525	1 1/2 x 3	\$28.95
C-EC40-20X3-525	40/20/20/20@525	1 1/2 x 3	\$28.95
C-EC4020X2-525	40/40/20/20@525	1 1/2 x 3	\$30.95
C-EC80-40-30-20	80/40/30/20@525	1 1/2 x 3	\$32.95

OTHER FRESH STOCK ELECTROLYTIC CAPS

PART NO.	MFD.	VOLT	SIZE(")	TYPE	PRICE
C-ET4700-16	4,700	16	1 1/2 x 5/8	axial	\$2.25
C-ET2200-25	2,200	25	1 1/2 x 5/8	axial	\$2.20
C-ET220-50	220	50	5/8 x 3/8	radial	\$1.50
C-ET47-250	47	250	1 1/4 x 5/8	axial	\$1.90
C-EC50-50-500	50/50	500	1 1/2 x 3	clamp	\$10.75

TWIST-MOUNT CAN MOUNTING PLATE

Phenolic insulator or metal plate for mounting FP type can capacitors.

1" dia. can insulator	S-H121	\$1.00
1" dia. can metal plate	S-H121M	\$1.00
1 1/2" dia. can insulator	S-H120	\$1.00
1 1/2" dia. can metal plate	S-H120M	\$1.00

ELECTROLYTIC CAN CAPACITOR SPECIALS

New, old stock. Subject to stock on hand. FP is twist lock, PFP is PC mount which can be used as twist mount.

PART NO.	CAPACITY@VOLT	TYPE AND SIZE	PRICE
C-EC20-40-5C-8C	20@350, 40@300, 500/800@50	PFP, 1 1/2" x 3"	\$4.95
C-EC30-500	30/400, 500@50	PFP, 1" x 3"	\$4.95
C-EC50-1C-10-20	50/100@350, 10@300, 20@25	PFP, 1 1/2" x 2 1/2"	\$4.95
C-EC100X4	100/100@450, 5@50, 25@25	PFP, 1 1/2" x 3 1/2"	\$17.95
C-EC220-70-150	220/70@150	PFP, 1" x 2 1/2"	\$2.50
C-EC300-100-80	300/100/80@150	PFP, 1 1/2" x 2 1/2"	\$2.50
C-EC200-200-40	200/200@175, 40@300	PFP, 1 1/2" x 2 1/2"	\$2.50

MULTI & SINGLE SECTION TUBULAR ELECTROLYTICS

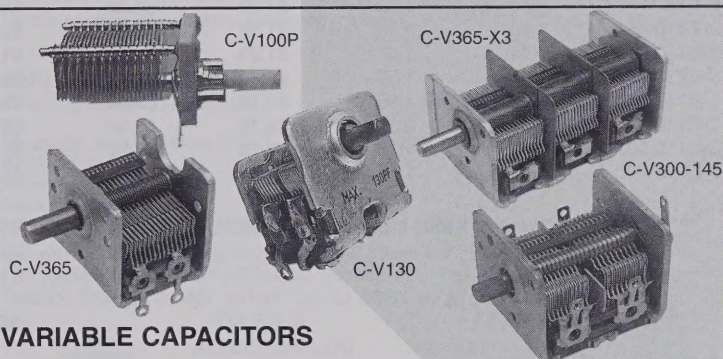
Fresh stock—no leakage. 3/4" dia.

PART NO.	CAPACITY@VOLTAGE	PRICE
C-ER33-47-160	33/47@160	\$5.50
C-ER47-47-160	47/47@160	\$6.25
C-ER47-80-160	47/80@160	\$8.25
C-ER33-33-47	33/33/47@160	\$7.50
C-ER33-47-22	33/47@160, 22@25	\$6.50
C-ET10-10	10/10@450	\$6.50
C-ET16-800	16@800, 900 surge	\$11.25
C-ET25-800	25@800, 900 surge	\$12.50

APC VARIABLE AND TRIMMER CAPACITORS

Subject to stock on hand.

PART NO.	TYPE	DESC.	PRICE
C-VT12	TRIMMER	3-12 pF, ceramic	\$1.50
C-VT12-A	TRIMMER	3-12 pF, ceramic	\$1.50
C-VT13	TRIMMER	2.5-13 pF, ceramic	\$1.50
C-VT1D5-15	TRIMMER	1.5-15 pF, ceramic	\$1.00
C-VT330	TRIMMER (DUAL)	3-12, 3-12 pf ceramic	\$1.50



VARIABLE CAPACITORS

Single section 100 pf, 1 1/2" long frame, 1/4" dia. shaft 1 1/2" long, teflon shaft, ceramic base, screwdriver or knob adjustable, Full rotation.

C-V100P \$17.95

Two section tuning condenser. 0-128 pf with trimmer on both sides. Very nice unit with ball bearing, 1/4" length shaft, 3 pc mounting lugs on back.

C-V130 \$11.95

Single section 365 pf, 1 1/2" long frame, 1/4" dia. shaft 3/8" long, CW rotation.

C-V365 \$10.95

Two section 299 pf, 2 1/2" long frame, 1/4" dia. shaft 3/4" long, diecast frame, spring loaded balance gear, ceramic insulators, 180° rotation. While supplies last.

C-V299 \$11.95

Two section 233 and 86 pf, 1 1/2" long frame, 1/4" dia. shaft 3/8" long, CCW rotation.

C-V233-86 \$16.50

Two section superhet. 19 plate 145-30 pf oscillator section with trimmer, 21 plate 300-30 pf RF section with trimmer. Capacity increases with CCW rotation. 1 1/2" x 1 5/8" x 1 7/8". 1/4" flatted shaft. While supplies last.

C-V300-145 \$9.95

Three section, 365 pf, 3 1/4" long frame, 1/4" x 1" shaft.

C-V365-X3 \$19.95

Three section 500 pf, 3 3/8" long frame, 1/4" dia. shaft, 1 1/8" long, CCW rotation. While supplies last.

C-V500-X3 \$19.95

Three section, double air gap, all sections 7 plate 30-14 pf, no trimmers. Capacity increase with CCW rotation. Outer shaft 1/2 turn, 1/4" flatted, 5/8" long. Inner shaft 4 turn, 1/8" flatted.

C-VKFMX3 \$4.95

CAN CAPACITOR MOUNTING CLAMP

Clamp for mounting electrolytic capacitor cans in vertical position. Supplied with #6-32 screw and nut.

1" dia.	S-H123	\$1.65
1 1/8" dia.	S-H122	\$1.50
1 3/8" dia.	S-H124	\$1.50
2" dia.	S-H125	\$1.80

AXIAL LEAD ELECTROLYTICS

Highest quality low leakage tubular electrolytic capacitors. Rated for 85°C operation. Tolerance -20%, +50%.



Note: arrows point to negative or ground end of cap.

PART NO.	DIA. (")	LENGTH (")	1-9	10-49	50+
C-ET10-50	0.25	0.49	\$0.47	\$0.42	\$0.36
C-ET22-50	0.25	0.63	\$0.58	\$0.52	\$0.44
C-ET33-50	0.32	0.63	\$0.58	\$0.52	\$0.44
C-ET47-50	0.32	0.63	\$0.66	\$0.59	\$1.51
C-ET10-160	0.40	0.79	\$0.79	\$0.71	\$0.60
C-ET22-160	0.49	0.98	\$0.98	\$0.88	\$0.74
C-ET33-160	0.49	1.18	\$1.37	\$1.23	\$1.04
C-ET47-160	0.49	1.18	\$1.48	\$1.33	\$1.12
C-ET100-160	0.63	1.18	\$2.32	\$2.08	\$1.77
C-ET4D7-350	0.40	0.98	\$0.83	\$0.74	\$0.63
C-ET10-350	0.49	1.18	\$1.00	\$0.90	\$0.76
C-ET22-350	0.63	1.18	\$1.64	\$1.47	\$1.25
C-ET33-350	0.63	1.57	\$1.96	\$1.76	\$1.49
C-ET47-350	0.71	1.58	\$2.48	\$2.20	\$1.85
C-ET100-350	0.98	2.36	\$2.25	\$2.02	\$1.71
C-ET4D7-450	0.49	1.18	\$1.22	\$1.09	\$0.93
C-ET10-450	0.63	1.18	\$1.28	\$1.15	\$0.98
C-ET22-450	0.71	1.57	\$1.93	\$1.73	\$1.47
C-ET33-450	0.88	1.57	\$2.68	\$2.41	\$2.05
C-ET47-450	0.88	1.96	\$3.78	\$3.40	\$2.84
C-ET100-450	0.98	2.36	\$4.39	\$3.95	\$3.34
C-ET10-500	0.63	1.18	\$2.18	\$1.96	\$1.66
C-ET22-500	0.63	1.57	\$2.73	\$2.45	\$2.08

SCREAMIN' DEAL!

**KIT OF AXIAL LEAD ELECTROLYTIC CAPACITORS**

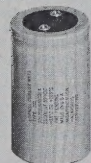
Don't pass up this deal!! Several popular electrolytic values have been put into a kit for your convenience.. Save 15% over individual prices. 6 each of the following types: 22-50, 22-160, 33-160, 100-160, 22-450, 33-450, 47-450, 100-450.

C-ET KIT**\$91.95****NEW OLD STOCK ELECTROLYTIC CAPS**

PART NO.	MFD.	VOLT	SIZE(")TYPE	PRICE
C-ET200-30	200@90V 30@60V		2 1/2 x 1 radial/clamp	\$0.50
C-ET200-150	200	150	2 1/2 x 1 axial	\$1.50
C-ET200-300	200	300	3 1/2 x 3/4 axial	\$4.25
C-ET47-35	47	35	1 x 3/4 axial	\$0.50

COMPUTER GRADE HIGH CAPACITY CAPACITORS (While supplies last)

High capacity, screw connections. Clamp mount. Clamps sold separately.



PART NO.	MFD@VOLTS	SIZE(")	PRICE
New Stock			
C-EC55000-16	55,000@16	2 x 3 1/16	\$9.95
C-EC62000-16	62,000@16	1 1/2 x 3 1/8	\$11.95
Surplus (New Old Stock)			
C-EC250-450	250@450	1 1/2 x 4 1/8	\$8.95
C-EC1400-450	1,400@450	2 1/2 x 5 1/8	\$15.95

HEAVY DUTY CONTINUOUS DUTY VARIABLE CAPACITORS

High voltage, high wattage, continuous duty capacitors. Insulation between rotor and stator is achieved through 1/4" thick, high quality military spec ceramics riveted to plated steel end plates. End plates are tied together by solid rods, forming a rigid structure. The rotor rides on ball bearings housed between front end plate and the stainless steel shaft. Blades are heavy .032" thick aluminum. The relationship between rotation and capacitance is almost perfectly linear. Insulated shaft.

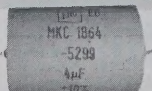
Lower Price!

C-V250-2500	250 pF, 2500 V max, .075" air gap, 37 blades	\$45.00
C-V250-3500	250 pF, 3500 V max, .012" air gap, 53 blades	\$48.00

METALIZED FILM CAP

4 mf, 200 WVDC, 10% tolerance

C-MF4-200 \$0.50

**BLACK BEAUTY CAP**

C-BBD0068-600
.0068 mf, 600 V
\$0.50

CERAMIC DISC CAPACITORS

PART NO.	TOLERANCE	PRICE
C-D390-2000	±10%	\$0.15
C-D470-2000	±10%	\$0.20
C-D1000-2000	±10%	\$0.22
C-D2000-2000	±10%	\$0.36
C-D100-3000	±10%	\$0.38
C-D330-3000	±10%	\$0.38
C-D470-3000	±10%	\$0.38
C-D1000-3000	±10%	\$0.30
C-D5000-3000	±20%	\$0.82
C-D10000-3000	±20%	\$1.42
C-D220-6000	±10%	\$0.44
C-D470-6000	±10%	\$0.62
C-D560-6000	±10%	\$0.62
C-D1000-6000	±20%	\$0.62
C-D2200-6000	±20%	\$0.90
C-D3300-6000	±20%	\$1.53
C-D500-10000	±20%	\$0.95
C-D1000-10000	±20%	\$0.95
C-D2500-10000	±20%	\$1.95

SILVER MICA CAPACITORS

500 volt, 5% tolerance. Dipped epoxy coating. Capacitance in pico farads.

PART NO.	PRICE	PART NO.	PRICE
	1-49 50+		1-49 50+
C-SM22	\$0.55 \$0.50	C-SM390	\$0.99 \$0.89
C-SM68	\$0.55 \$0.50	C-SM500	\$1.09 \$0.99
C-SM82	\$0.55 \$0.50	C-SM680	\$0.99 \$0.89
C-SM100	\$0.55 \$0.50	C-SM820	\$0.99 \$0.89
C-SM150	\$0.55 \$0.50	C-SM1000	\$1.09 \$0.99
C-SM250	\$0.75 \$0.68	C-SM8200	\$1.09 \$0.99
C-SM360	\$0.89 \$0.80		

HIGH VOLTAGE CAPACITORS

C-XD0051-1200	.0051 mF, 1,200 VDC foil paper in oil	\$1.50
C-D0004-2500	.0004 mF, 2,500 VDC mica block, 6-32 threaded mounting holes on 1 1/4" centers	\$2.00
C-D004-2500	.004 mF, 2,500 VDC mica "block", 6-32 threaded mounting holes on 1 1/4" centers.	\$2.00
C-D01-6K	.01 mF, 6,000 VDC disk	\$2.00
C-D001-6K	.001 mF, 6,000 VDC disk	\$2.00
C-BBD0047-6000	.0047 mF, 6,000 VDC axial	\$4.90

MISCELLANEOUS CAP CLAMPS

S-H411	2" "C" clamp, 2 hole mounting	\$1.85
S-H126	1", 1 hole mounting	\$0.50

**BAG 'O CAPS!**

Refill your miscellaneous capacitor drawer. A minimum of 200 assorted capacitors, mostly ceramic disk. While supplies last!

C-BAGO**\$4.95**

100 VOLT STRANDED TINNED HOOK-UP WIRE

Copper wire. UL style 1015, rated to 105°C. Perfect for new projects or re-wiring of any electrical equipment. Available in 16 and 22 gauge on 50 foot spools.

22 AWG			16 AWG		
S-W22B	\$3.75	Black	S-W16B	\$6.75	
S-W22R	\$3.75	Red	S-W16R	\$6.75	
S-W22W	\$3.75	White	S-W16W	\$6.75	
S-W22G	\$3.75	Green	S-W16G	\$6.75	
S-W22Y	\$3.75	Yellow	S-W16Y	\$6.75	
S-W22O	\$3.75	Orange	S-W16O	\$6.75	

"PUSH-BACK" CLOTH COVERED WIRE

New old stock push-back hook-up wire. 22 AWG, solid black color.

Per foot	S-W712	\$0.22
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BRAIDED COVERED POWER CORD

Brown 2 conductor 18 gauge, stranded power cord, similar to woven cloth covered cords in early AC radios.

20 feet	S-W102-20	\$7.50
50 feet	S-W102-50	\$16.50
250 foot spool	S-W102-250	\$69.00
Large dimension braid covered power similar to above but with larger overall physical dimension to more accurately represent type of wire used on early AC radios. Sold by the foot.	S-W103	\$2.50

CELANESE COVERED WIRE

White celanese covered. Resembles early cotton covered wire. May be color dyed. Litz wire ideal for loop antennas. Cotton wrap. **20 foot minimum per type.**

#24 Magnet Wire, Per Foot	S-W203	\$0.06
#26 Magnet Wire, Per Foot	S-W107	\$0.05
54/38 Strand-Litz Wire, Per Foot	S-W106	\$0.12
25/41 Strand-Litz Wire, Per Foot	S-W108	\$0.12

MAGNET WIRE

Insulated with two coats of enamel. Perfect for winding coils and transformers.

21 gauge, 100 foot spool	S-WL3-610	\$4.95
22 gauge, 200 foot spool	S-WL3-611	\$4.95
24 gauge, 200 foot spool	S-WL3-612	\$4.95
28 gauge, 200 foot spool	S-WL3-614	\$4.25
32 gauge, 400 foot spool	S-WL3-616	\$4.25
36 gauge, 750 foot spool	S-W318	\$4.25
40 gauge, 1500 foot spool	S-W320	\$4.25



EARLY STYLE SQUARE BUS WIRE

#12 AWG Square tinned copper, per 10 feet	S-W140	\$2.50
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OLD STYLE SPEAKER WIRE

Brown cloth-covered 2-conductor tinsel wire, like found on 1920's vintage horn and cone-type speakers. Sold by the foot, terminals not included. See page 52 for phone tips.

P-W413	\$1.00 / ft
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BUS WIRE

#22 solid tinned copper bus wire. Approximately 100'. per spool	S-W428	\$2.95
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2 CONDUCTOR SHIELDED CABLE

Two stranded 24 gauge wires, PVC insulated, cabled with fillers. Bare copper spiral shield. Blue outer insulation. Approximately 1/8" outside diameter. Per foot.

S-W450	\$0.25
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STRANDED AERIAL WIRE

Stranded 16-gauge copper wire, not insulated. For outside antennas. 50 foot roll.

S-W32-146	\$5.95
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NICHROME RESISTANCE WIRE

Use for making wirewound resistors, small heater elements, or repairing filament potentiometers. Available in 4 sizes. **Minimum order - 20 feet.**

OHMS/FT.	GAUGE	PART NO.	PRICE/FT.
2.57	26	S-W500	\$0.15
4.09	28	S-W501	\$0.15
6.50	30	S-W502	\$0.15
20.80	35	S-W503	\$0.15

POWER CORD RECEPTACLE

Mates with power cord above. Rated for 15A, 250V. UL listed.

P-SP2-106

\$1.75

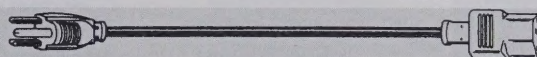


DETACHABLE POWER SUPPLY CORD

3 conductor unshielded, PVC jacketed. 1250W/10A rating. 7' 6" long. Mates with receptacle below.

S-W119

\$3.95



CLOTH COVERED HOOK-UP WIRE

#20 stranded copper wire covered with lacquered cotton braid, closely resembles wire used in the late 20's and 30's. Available in 8 colors, on 50 foot spools.

S-W703	\$7.25	Green	S-W707	\$7.25		
	Black	S-W704	\$7.25	Yellow	S-W708	\$7.25
	Red	S-W705	\$7.25	White	S-W709	\$7.25
	Blue	S-W706	\$7.25	Brown	S-W710	\$7.25

To get our screamin' deal, buy all colors at the same time and receive an over 10% discount on buying each individually. Just ask for part number

S-WHOOKUP-SD

\$52.20



COTTON COVERED MULTI-CONDUCTOR CABLE

8 conductor 20 gauge stranded wire with brown cotton braid over all. Use to replace 1920's Atwater Kent battery cable, etc. per foot

S-W711

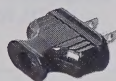
\$3.00

REPLACEMENT CORDS

6ft w/plug Brown non-polarized	S-W105	\$1.50
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18 gauge, 2 conductor, SPT-1, 6 feet, long with molded-on plug.

Black non-polarized	S-W118	\$1.95
Brown polarized	S-W104	\$1.75
Black non-polarized	S-W117	\$1.50
16 gauge, 3 conductor, 8', 13A, with molded crush resistant low profile plug, black. For high power projects.	S-W120	\$3.50
18 gauge, 3 conductor, 6.7', with shield, black	S-W121	\$2.50
6', black, polarized.	S-W451	\$1.50



AC CORD PLUG

Flat, brown phenolic plug, 1 1/8" wide x 1 1/16" deep.

P-SP2-104

\$1.95

STRAIN RELIEF

Rubber type for standard zip cord.

For 1/8" dia. hole.

2 conductor (SP1)

3 conductor (fits S-W120)

16/3 SJT, 7/16" cord dia.

P-H11-402

\$0.25

P-H11-406

\$0.25

P-H1100

\$0.25

P-H1200

\$0.25

INSULATORS

-Old style insulator for antenna installations. Molded plastic

S-H2130 \$1.25

-Ceramic form, 2 1/2" long by 1/2" dia. Both ends with 6-32

threads. Use as standoff or coil/choke form S-H135 \$2.00

-Mounting bracket for above, pkg/10

S-H113 \$0.25

-Double eyelet for above, pkg/10

S-H114 \$0.30

-Porcelain egg-shaped insulator. 1 1/8" x 7/8"

S-H131 \$2.50

-Porcelain rectangular insulator, 0.7" x 0.7" x 1.2" long,

8-32 threads both ends. S-H132 \$2.50

-Porcelain cylindrical insulator, 3/8" x 1 1/2" long, 6-32 threads both

ends. S-H133 \$2.50

-Antenna nail on knob glazed insulated (not shown). Use to

attach antenna to exterior of buildings, trees, etc. S-H134 \$2.50

WIRE-HOOK UP

25' assorted colors 22 gauge

S-W452 \$4.00



WIRE, DOUBLE COTTON

#22-150', sold by the foot S-W207 \$2.00



DUAL RCA

CABLE 6 ft.

S-H270 \$1.00



LINE CORD

Polarized, 6' black, SPT, No plug

S-W451 \$1.50



WIRE, COTTON

push-back, 20 foot minimum

S-W18-GREEN

\$0.15/ft

Reproduction molded plastic knobs with set screws



ZENITH

1 1/4" dia., 1/8" dia. shaft, ivory, tuning knob
P-K189 \$ 5.25



1" dia., 1/8" dia. shaft, ivory
P-K190 \$5.25



1 1/8" dia., 1/8" dia. shaft, walnut finish
P-K193 \$6.75



1 1/8" dia., 1/8" dia. shaft, walnut finish
P-K194 \$6.25



1 1/8" dia., with pointer, 1/8" dia. shaft, walnut finish
P-K195 \$6.25



1 1/8" dia., 1/8" dia. shaft, walnut finish
P-K196 \$6.25



1 1/8" dia., 1/8" dia. shaft, walnut finish
P-K204 \$6.75



P-K175 &
P-K176

PHILCO

Molded plastic knobs with set screw to fit 1/2" shaft.

"Rosette Knob"-Used on 1931-32 Philco cathedral

P-K175 1 1/4" dia. tuning knob, brown \$6.00

P-K176 1/2" dia. brown \$6.00

P-K177 1 1/8" dia. skirt, 1/8" dia. face \$6.00



P-K178 &
P-K179

Hex-shaped Knob-Used on 1933-34 Philcos

P-K178 1" dia. tuning knob, black \$6.00

P-K179 1 1/8" dia. black \$6.00

Mid-30's Philco Knobs-Push-on for flatted shaft

P-K181 1 1/8" dia., brown w/pointer \$5.25

P-K185 1 1/8" dia. Inner knob for concentric tuning \$5.50

P-K186 1 1/8" dia. Outer knob for concentric tuning \$5.50

P-K185 P-K209 1 1/8" dia. with pointer \$5.50

1/8" long x 1/2" dia. neck to extend into cabinet \$5.50



RCA

1 1/4" diameter, 1/8" shaft, brown.

P-K197 \$5.25



ZENITH TRANSOCEANIC KNOB
"BRIGHTS" For H 500 & 600 series, 1/8" dia., pkg of 2. P-K985 \$5.00
(While supplies last)

ATWATER KENT



1 1/8" dia., brown P-K982 \$5.50



1 1/8" dia., brown P-K983 \$6.00



3/8" dia., brown with white engraving P-K984 \$7.50

ZENITH BANDSWITCHES

Used in Zenith radios in the late 30's and early 40's. 1938 model used lever with set screw in 3:00 position, 1939 model and 1940 models used lever with set screw in 12:00 position.

3:00 set screw P-K220 \$12.75

12:00 set screw P-K221 \$12.75

Internal metal bandswitch link. Internal part for large Zenith radios made in 1940-1942 that bandswitch wheel attaches to. Originally a potmetal part. P-K223 \$11.00



MISCELLANEOUS NOS KNOBS

1/8" x 1/8" dia. pushbutton (Zenith) - ivory

P-K923 \$0.50

2 1/2" long pointer knob - ivory, 1/8" shaft

P-K932 \$1.00

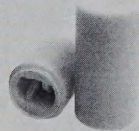
1 1/2" long pointer knob - brown, 1/8" shaft

P-K454 \$1.00

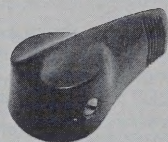
1/4" long pushbutton - brown

P-K810 \$1.00

P-K923



P-K945



P-K932



P-K810



P-K981

GENERIC REPLACEMENT KNOBS

Late '30's style radio knob, injection molded plastic. 1" dia., fits 1/8" shaft, with set screw.

P-K981 \$3.25

Black Alco with indicator line, set screw, used with 1/8" shaft.

P-K309 \$1.50

Knurled Aluminum knobs, "positive grip", notched tip indicator, fits 1/8" shaft.

Alum 3/8" dia P-K310 \$2.25

1" dia P-K312 \$2.75

3/8" dia P-K311 \$2.25

Black 1 1/8" dia P-K313 \$2.75



P-K310, P-K311,
P-K312 & P-K313



P-K307

Guitar Chicken Feet, set screw included

Black P-K307 \$0.50



P-K304

Brushed face knob with indicator line, fits 1/8" shaft, 1 1/8" dia., double set screw. Ivory P-K304 \$3.00

WOOD KNOBS

An exact reproduction of an early wood knob commonly found on many radios from 1928-1934. Knob is 1" diameter and 1/4" deep, with metal insert and set screw to fit on 1/4" diameter shaft.

Walnut P-K903 \$5.00

Mahogany P-K904 \$5.00



Similar to above except different style with 1 1/8" skirt at base of knob. Available in both walnut and mahogany finish.

Walnut P-K971 \$5.00

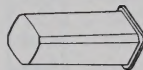
Mahogany P-K972 \$5.00

PHILCO PUSHBUTTONS

Reproductions of the wine-colored push-buttons used for station presets on 40's vintage Philcos. Buttons measure 7/16" x 7/16" across front surface and come in 2 lengths. Back of buttons are slotted to fit onto 1/8" switch actuator.

1/4" long P-K411 \$2.25

1 1/4" long P-K412 \$2.35



REPRODUCTION TRF TUNING KNOB

Direct reading channel dials for Atwater Kent radios. Replaces original knobs graduated 0 - 100, with direct frequency markings 55 - 150 for the broadcast band. 3/8" O.D., 1/8" shaft size with set screw.

P-K210R \$7.50



RADIO KNOB FELT

Premium quality wool felt washers. Medium brown in color, these washers will resist wear and hold their shape over time. All have center holes punched. Most have 1/8" i.d. Sold in packages of 5 of a size.

1/8" O.D. P-H181 \$1.30

3/8" O.D. P-H200 \$1.40

1" O.D. P-H202 \$1.60

1/8" O.D. P-H201 \$1.50

1 1/8" O.D. P-H203 \$1.70

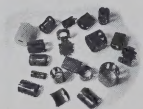
KNOB SPRINGS

Assortments of knob springs for 1/8" moon shaft.

P-KS209 \$1.00 (While supplies last)

3/8" high x 3/16" O.D. - "D" shaped, bag of 6 P-KS215 \$0.60

3/8" high x 1/32" O.D. - "D" shaped, bag of 6 P-KS221 \$0.60



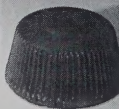
NOS KNOB

New-old-stock generic knob. Fits 1/4" knurled shaft, 1 1/8" diameter. Black. Good for amps, kits, etc.

P-K986 \$1.25



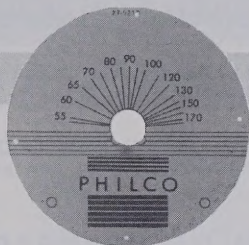
Knob, RCA
1 1/8" pointer brown
P-K198 \$4.50



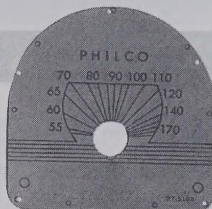
Knob spring, 6pk
P-KS215 \$0.60

PHILCO RADIO DIALS

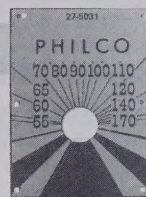
Philco generally used these dials with the listed models; however, there are some exceptions so please check your equipment thoroughly. Light brown translucent plastic, with black lettering.



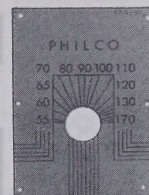
P-D27-5210
\$12.95
Philco 33B



P-D27-5168
\$12.95
Philco 84B



P-D27-5031
\$12.95
Philco 37-84



P-D27-5100
\$12.95
Philco 93B

ATWATER KENT TUNING BELTS

Beryllium copper belt stock for early A.K. and other dial drives. .004 in. thick by 3/16" wide. Can be easily soldered for joint. 5 foot length **S-M242** \$3.00

ATWATER KENT DIAL DRIVE PULLEY

A functional reproduction of the Atwater Kent pulley used in the belt drive systems of mid-twenties vintage TRF receivers. Pulley is double-width 2-belt type, but may also be used to replace the single-belt pulleys. 1 1/8" O.D., 1/4" I.D., 1/2" wide. **P-D115** \$18.50

ZENITH DIAL BELTS - While Supplies last!!

Belts are rubber impregnated fabric 1/8" wide and 1/16" thick. Equiv. to G.C. #167. Circumference Around Pulleys - 8 3/16", Cut Length - 9". Fits chassis no's. 5522, 5523, 5638, 5642, 5648, and 5710. **S-M420** \$9.95

Call for limited selection of other NOS belts not listed.

S-MDIAL-BELT \$11.95

BLACK PANEL MATERIAL

Black Lucite panels closely resemble "Bakelite" panels used on early battery radios. Glossy finish, 1/4" thick. Can be difficult to machine.

8" x 12" **S-M710** \$7.25
8" x 24" **S-M710L** \$13.50

DIAL DRIVE CABLE

We searched and searched and finally found a new supplier for 2 sizes of dial drive cable. This is a no-stretch black cord made of nylon braid over a fiberglass core. Available in 25 foot lengths.

Medium/Heavy .040" dia. **S-M74-25** \$3.25
Standard Thin .028" dia. **S-M75-25** \$2.95

DIAL REPRODUCTION MATERIAL

Translucent tan color plastic sheet, can be cut with scissors. Ideal for making replacement Philco or other dials. 8" x 10" sheet, .016" thick. **S-M190** \$7.95

DRI-TRANSFER LETTERING

Rub-on lettering simplifies panel labeling, dial marking, etc. Available in either black or white color.

DIAL MARKING KIT—Contains dial patterns, arcs, lines, dots, switch symbols, graduation lines, lines for rotary tap switches and calibrated meter dials. 3 sheets.

black **S-M175** \$3.95
white **S-M176** \$3.95

AUDIO, TV, & HI-FI—Contains over 400 words from 'AC' to 'Zero' in alphabetical order, as well as miscellaneous numbers and letters. 3/4" tall lettering, 4 sheets.

black **S-M177** \$3.95
white **S-M178** \$3.95

AMATEUR RADIO & CB—Contains over 300 words from 'AC' to 'X-TAL' in alphabetical order, as well as miscellaneous numbers, letters and frequency designations. 3/4" tall lettering, 4 sheets.

black **S-M179** \$3.95
white **S-M180** \$3.95

DIAL GLASS RUBBER EXTRUSION

High quality neoprene rubber extrusion available in three sizes. Illustration is not to scale. Sold by the foot.

MEASUREMENT
1/32" w x 3/16" h
7/32" w x 3/16" h
1/4" w x 1/4" h

INTERNAL GAP
0.080"
0.090"
0.050"

P-D282 P-D280, P-D281

PRICE
P-D280 \$3.50
P-D281 \$5.75
P-D282 \$4.25

WSMK

WSM

WSNJ

WSMB

STATION CALL LETTER TABS

Reproduction paper station inserts like used on Philco and other late 30's and 40's vintage radios with push-button tuning. Over 300 stations provided with 3/16" high letters in translucent ivory color on black background. Trim to size to fit various models. **P-D130** \$4.95



LAMP HOOD FOR RADIOLA 18

A reproduction of the dial light hood used on the Radiola 18. These are precision cast in pewter and brass plated and "antiqued" to look just like the originals.

P-D157 \$8.95

ZENITH DIAL GLASS

A reproduction of the round convex glass that covered the tuning dial on middle and late 30's Zeniths. 0.5 lb. 8 1/8" diameter. **P-D272** \$7.95



DYNACO FM-1 TUNER TUNING INDICATOR PANEL

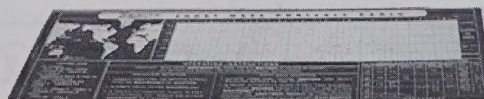
You just replaced the EM84 indicator tube in your Dynaco tuner, but can't see it through the scratches and cracks and years of dirt. Replace the

panel with a brand new one! **P-D200** \$1.50

Also available is dial cord for your Dynaco tuner in case your old stuff is worn or even (dare we say) cracked and broken!! **S-MDYNA** \$2.00



PHILCO 70 ESCUTCHEON BROWN REPRODUCTION
P-D199 \$7.50



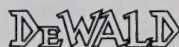
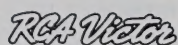
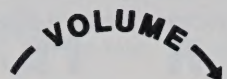
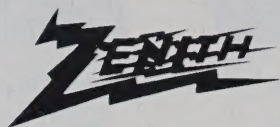
ZENITH LOG CARD

Perfect replication of log card from Zenith model 7G605. More commonly known as the Zenith Clipper Transoceanic or Zenith Bomber Transoceanic. Replaces the damaged card that you inherited with your radio. Has semi-gloss finish and matches original thickness of cardboard. Holes are not pre-drilled due to variations from radio to radio. Get one today!! **S-MZENITHLOG** \$9.95

High quality lacquer decal reproductions for early radio cabinets.



**ATWATER KENT
STEWART-WARNER**



ATWATER KENT, STEWART-WARNER—The A.K. name comes both in solid gold and solid black colors, and the Stewart-Warner name is black with gold outline. Also contains the words 'OFF-ON,' 'VOLUME,' 'TONE,' 'BAND,' 'AM,' 'FM,' 'BC,' 'SW,' 'POL' and 'AV.'

S-M906 \$3.00

PHILCO—Features the Philco name in 3 sizes, and 20 different knob function labels as found on Philco receivers of the 1930's and 1940's, including OFF-ON, BASS, B'DC'ST, POL., S.W., TONE, BAND SELECTOR, TRANSITONE, HIGH FIDELITY, MAGNETIC TUNING, VOLUME, TREBLE, SELECTIVITY AND PHONO-RADIO all in gold with black outline. Many of the words are curved to follow the contour of the knobs.

S-M907 \$5.00

MINIATURE LAMP SOCKETS

Bayonet lamp sockets for #44 and #47 lamps, etc.



P-L101	\$1.25
P-L103	\$1.25
P-L104	\$1.25
P-L105	\$1.25

INDICATOR LIGHT

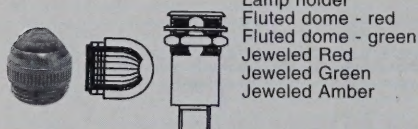
Classic brushed antique finish for use with T-3 1/4 miniature bayonet base bulbs (sold separately). Flat, back frosted green lens. Mounts from rear in 1/8" hole. Comes with 3 knurled mounting rings. 75W, 125V rating.



P-L114 \$1.95

RELAMPABLE INDICATOR LIGHT

Relampable front panel indicators accept a variety of T-2 and T-3 1/4 miniature bayonet lamps. Two colors of fluted dome lens available, three colors of jeweled lens available. Order separately from lamp. 1/8" chassis hole.



Lamp holder	P-L110	\$3.95
Fluted dome - red	P-L111	\$1.75
Fluted dome - green	P-L112	\$1.75
Jeweled Red	P-L115	\$2.25
Jeweled Green	P-L116	\$2.25
Jeweled Amber	P-L117	\$2.25

ZENITH—Gold with black outline, in 2 common sizes. Also contains the words 'AUTO-MATIC,' 'MEDIUM WAVE,' 'STD. BROADCAST,' AND 'SHORTWAVE.' **S-M904 \$3.00**

EMERSON TREBLE-CLEF LOGO—Gold with black outline, in 2 common sizes. Also contains the words 'OFF-ON,' 'VOLUME,' 'TONE,' 'BAND,' 'AM,' 'FM,' 'BC,' 'SW,' 'POL' and 'AV.'

S-M905

\$3.50

GENERAL ELECTRIC, FADA & GAROD—"General Electric" logo appears in 3 commonly used sizes, along with "FADA Radio" and "Garod." Gold with black outline.

S-M909

\$4.50

EMERSON, DEWALD, BELMONT, SONORA & TOM THUMB—"Emerson" script logo (without treble-clef sign) and other manufacturer's logos for popular plastic radios. Gold with black outline.

S-M910

\$4.50

RCA, STROMBERG-CARLSON & ADMIRAL—"RCA Victor" appears in 3 different logo styles, along with "Stromberg-Carlson" and "Admiral." Gold with black outline.

S-M908

\$5.00



We have another deal for you. Buy one of each type of decal and receive an almost 20% discount over buying each individually!!

S-MDECAL-SD

\$23.30

INSTRUCTIONS FOR APPLYING WATER RELEASE DECALS Cut out portion of decal sheet to be used, and soak in water until decal will slide off of paper backing. Immediately apply wet decal to radio cabinet and pat dry. Lacquer finish may be applied over decal if desired.

DIAL LAMPS Long life general replacement lamps for dials, indicators, etc. Packages of 10 except when noted.

TYPE	VOLTS	AMPS	BASE	BULB TYPE	PART NO.	PRICE PKG/10
40	6.3	.15	Screw	T-3 1/4	P-40	\$3.50
41	2.5	.50	Screw	T-3 1/4	P-41	\$3.50
42	3.2	.35	Screw	T-3 1/4	P-42	\$3.50
43	2.5	.50	Bayonet	T-3 1/4	P-43	\$3.50
44	6.3	.25	Bayonet	T-3 1/4	P-44	\$3.50
45	2.5	.35	Bayonet	T-3 1/4	P-45	\$3.50
46	6.3	.25	Screw	T-3 1/4	P-46	\$3.50
47	6.3	.15	Bayonet	T-3 1/4	P-47	\$3.50
48	2.0	.06	Screw	T-3 1/4	P-48	\$3.50
49	2.0	.06	Bayonet	T-3 1/4	P-49	\$3.50
50	7.5	.22	Screw	G-3 1/2	P-50	\$3.50
51	7.5	.22	Bayonet	G-3 1/2	P-51	\$3.50
53	14.4	.12	Bayonet	G-3 1/2	P-53	\$3.50
55	7.0	.41	Bayonet	G-3 1/2	P-55	\$3.50
57	14.0	.24	Bayonet	G-3 1/2	P-57	\$3.50
81	6.5	1.02	Bayonet	G-6	P-81	\$1.25 each
NE2	120	.0007	Wire	T-2	P-NE2	\$1.95 each
NE45	105/125	.002	Screw	T-4 1/4	P-NE45	\$3.25 each
NE51	90/110	.0003	Bayonet	T-3 1/4	P-NE51	\$1.95 each



FUSE-TYPE LAMPS Fuse-type lamps as found in some

American Hi-Fi components of the 1960's.	1/4" x 1 1/4"	
Pkg. of 10	P-L107	(6 volts) \$4.50
Pkg. of 10	P-L108	(8 volts) \$4.50



WE HAVE GIFT CERTIFICATES! Are you looking for the perfect gift for your hobbyist friend, but aren't quite sure about the certain item they need? How about an Antique Electronic Supply gift certificate? They are available in any amount over \$20.00 and are good for 1 year after the date of issuance. Be the perfect Santa!! **I-200**

DIODES AND BRIDGES

DIODES - A semiconductor device which passes current in the forward direction (from anode to cathode), and blocks current in the opposite direction.

1N4005	1A	600V	P-Q1N4005	\$0.25
1N4007	1A	1000V	P-Q1N4007	\$0.25
1N5404	3A	400V	P-Q1N5404	\$0.35
6A05	6A	50V	P-Q6A05	\$0.85

ZENER DIODES - A semiconductor device that, above a certain reverse voltage (the zener value) has a sudden rise in current. If forward biased, the diode is an ordinary rectifier. When reverse biased, it exhibits a sharp break in its current-voltage graph. Voltage across the diode remains essentially constant for any further increase of reverse current.

1N4741A	1W	11V	P-Q1N4741A	\$0.30
1N4748A	1W	22V	P-Q1N4748A	\$0.30

FAST RECOVERY DIODES

1N4937	1A	600V	P-Q1N4937	\$0.30
FR107	1A	1000V	P-QFR107	\$0.30

HEXFRED DIODES - High performance, ultrafast diodes. Improve efficiency, reduce noise, allow higher frequency operation.

HFA08TB60	8A	600V	P-QHFA08	\$2.50
HFA16TA60C	16A	600V	P-QHFA16T	\$3.50
HFA16PB120	16A	1200V	P-QHFA16P	\$8.50

BRIDGE RECTIFIERS - A full wave rectifier with 4 elements in a bridge circuit so that DC voltage is obtained from one pair of junctions when an AC voltage is applied to another pair of junctions.

BR-34	3A	400V	P-QBR-34	\$1.00
BR-62	6A	200V	P-QBR-62	\$2.00
BR-81	8A	100V	P-QBR-81	\$2.25
BR-84	8A	400V	P-QBR-84	\$2.50
BR-104	10A	400V	P-QBR-104	\$2.50
BR-2505	25A	50V	P-QBR-2505	\$5.50

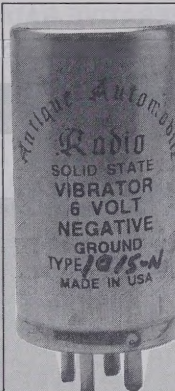
GERMANIUM DIODES - Point contact germanium diodes, ideal for crystal radio detectors.

1N34A	P-Q972	\$0.50
1N60	P-Q973	\$0.50

SOLID STATE VIBRATOR REPLACEMENTS

New manufacture solid-state replacements for 6 volt and 12 volt 3 and 4 pin vibrators. These replace our old line of solid state vibrators. 1 1/2" dia. x 2 1/2" high aluminum can.

Replace your buffer capacitor when you replace your vibrator!

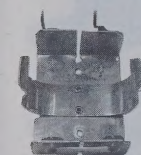


6V, 4 pin, neg. ground	P-V1015N	\$24.95
6V, 4 pin, pos. ground	P-V1015P	\$24.95
12V, 4 pin, neg. ground	P-V2015N	\$24.95
12V, 4 pin, pos. ground	P-V2015P	\$24.95
12V 3 pin, neg. ground	P-V2215N	\$24.95

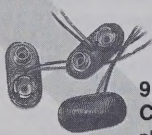
NEW-OLD-STOCK VIBRATORS!

12 volt, negative ground, 3 pin mechanical vibrator, new-in-box.

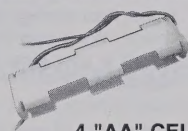
P-12-3 \$19.50



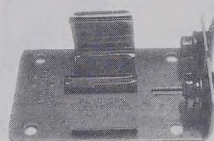
2 cell "C" battery holder
S-H156 \$0.75



9 VOLT CLIPS
pkg. of 3
S-H155 \$0.50



4-"AA" CELL HOLDER
S-H157 \$0.50



9V BATTERY HOLDER
S-H1290 \$1.00

EVEREADY BATTERIES



The following Eveready batteries are useful for powering portable radios like the Zenith Transoceanic, subminiature tube radios, and early transistor radios. The S-Z415 is used in our K-406 Regenerative Radio Kit.

PART	NO.	VOLT.	SIZE(")	PRICE
S-Z276	276	9	2.56 x 2.03 x 3.16	\$14.95
S-Z412	412	22 1/2	1.05 x 0.63 x 1.80	\$7.25
S-Z415	415	45	1.05 x 0.63 x 3.69	\$13.95
S-Z455	455	45	2.66 x 1.00 x 3.69	\$19.50
S-Z416	416	67 1/2	1.25 x 0.94 x 3.38	\$20.95
S-Z467	467	67 1/2	2.81 x 1.38 x 3.71	\$30.95
S-Z490	NO LONGER AVAILABLE - Recommend 2 455's in series			



MILITARY SURPLUS BATTERIES New, old stock military batteries. All have knurled nut terminals, except S-Z286 which takes octal plug. **While supplies last.**

PART NO.	VOLTAGE	SIZE(")	PRICE
S-Z281	1 1/2	2 1/2 x 6	\$5.95
S-Z282	4 1/2	2 1/2 x 3/4 x 2 1/2	\$6.25
S-Z283	22 1/2, 45	2 1/2 x 1 1/4 x 4 1/2	\$6.50
S-Z284	22 1/2, 45	4 1/2 x 2 1/2 x 6	\$9.95
S-Z286	1 1/2, 3, 4 1/2, 6	2 1/2 x 2 1/2 x 4 1/2	\$4.25

CONVENTIONAL PHONOGRAPH NEEDLES

For all set screw and thumb screw cartridges. Straight steel needles, good for 12 plays each.
Pkg. of 25 S-P119 \$1.95
Osmium, 78 RPM, 3 ml radius S-P163 \$1.75



PHONO PICK-UP WIRE

Fine extra flexible 4 conductor, color-coded cable, 5 ft. long.
S-WL3-644 \$5.95



SPINDLE
Universal 45
S-P100 \$4.00

MOTOR MOUNTING GROMMETS

Rubber grommets for mounting phonograph motors measure 1/2" dia., 1/4" high, and 1/4" inner dia. Pkg. of 9 P-R407 \$3.75



"C" WASHER ASSORTMENT

Contains 25 of the most popular sizes!
S-H401 \$1.75

Needle, replacement for Pickering - PD07/T, PAC, P/AC-1. 0.7D mil diamond stereo.

S-P977 \$9.95

REPLACEMENT ASTATIC NEEDLE Astatic number 51-1. Replaces Astatic: AC-C, CAC-W, CAC-WX, GC, 51-1M. American: B101B. E.V., 84-S, 0134, 0144 30. Shure: PC-11, PC-13, WC31AR. RCA: 74984, 76297, 79791, 941089-3. S-P974 \$13.50

We have a very limited inventory of phonograph parts. If you don't see what you want here, try West-Tech Services in Sebring, Florida at 941-471-0922.

REPLACEMENT NEEDLES - WHILE SUPPLIES LAST!!

PART NO.	TYPE	SPEED	CARTRIDGE USED IN	PRICE
S-P999	Crystal Sapphire	33-45-78	Arista/Astatic	\$3.00

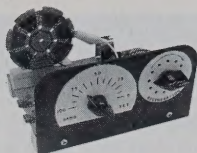
Needle, replacement for Sonotone 2T, 5T and 7T cartridges, mono.

S-P994 \$9.95



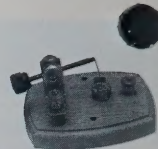
ONE TUBE REGENERATIVE RADIO KIT WITH SPIDER WEB COIL

Can use 1A5, 1C5, 1H4, 1Q5, 1T5, 1L4, 1T4, 1U4 or 1U5 tube (order separately). Includes tuning condenser, regeneration control, coil form, wire, hardware and instructions. Frequency range is 455KC to 8MC. Need only screwdriver and soldering iron to complete kit. Operates on 1.5V "C" size battery and S-Z415 45V battery (order separately). P-A466 high impedance headset is recommended for output (order separately). 1.0 lb. K-406 \$27.95



CRYSTAL DETECTOR

Beautiful wood based detector comes complete with cat's whisker, ball and rod assembly, holder for galena crystal and old style binding posts. Base is 1 1/2" x 3 1/2". Galena crystal not included. K-412 \$14.95



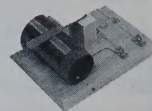
ANTENNA TUNER KIT

Antenna tuner covers the broadcast band through 30 Mhz. Toggle switch changes variable capacitor from parallel to series connection with coil. Coil is tapped to change inductance. Kit includes pre-drilled base and front panel board, air variable capacitor, coil form, knob, switch, hook-up wire and hardware. 3 1/2" x 5" x 3 1/2", 1.0 lb. K-405 \$24.95



THE 'PIONEER' BASIC CRYSTAL SET

A great beginner kit for the kids or the first time crystal set builder. Contains all parts to make the basic crystal radio set. Complete instructions included. K-410 \$15.95



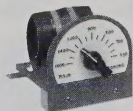
CRYSTAL RADIO KIT

A simple, yet highly sensitive crystal radio kit made out of common items found in most homes. Comes with pre-wound coil and galena crystal. Great one night project for the beginner or the kids. Marvel at listening to a radio made from "nothing". Requires crystal earphone (P-A480 order separately). K-417 \$22.95



REJECTOR TRAP KIT

Very useful for crystal radios, this trap can be placed in series with a long-wire antenna to reject powerful broadcast band stations that swamp weaker signals. Kit includes pre-drilled base and front panel board, air variable capacitor, coil form, knob, hook-up wire and hardware. 3 1/2" x 5" x 3 1/2", 1.0 lb. K-404 \$22.95



"SALT BOX" CRYSTAL RADIO

Build a working radio with a salt box! This AM band radio has higher than average selectivity due to the VARIO-COUPLER design. We supply everything needed except the salt box (found at your local store) and earphones (P-A480 order separately). K-419 \$24.95



GALENA CRYSTALS

Mounted Galena Crystals, like those used in early crystal detectors. Ideal for K-412 and other detectors. P-Q111 \$2.50



WIRELESS FM MICROPHONE / EARPHONE

A versatile transmitter that can transmit voice or music to any receiver within a range up to 30 feet. The small size makes it very compatible with many applications. Power is from a 9 volt battery, not included with kit. K-421 \$7.00



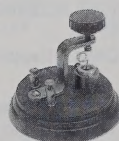
CRYSTAL-SET EXPERIMENTER'S KIT

Experiment & design different crystal radios; capabilities of circuits limited only by the builder. Consists of chassis, front panel, 2 spider web coils mounted to be variable to each other, cylinder style coil with 4 windings, 2-365 pf single gang variable capacitors, trimmer caps, diodes, miscellaneous capacitors, all hardware and instructions. K-418 \$42.50



CRYSTAL DETECTOR

A working reproduction of the "Junior Detector Stand" sold by the William B. Duck Co. in 1921. Base is finished in dark mahogany, metal fittings are polished brass, gold lacquered. Crystal included. Base diameter is 3", overall height is 3". K-411 \$42.50

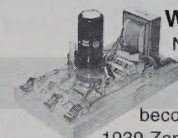


"MASCOT TUNING COIL"

A working reproduction of the loose coupler featured in the William B. Duck Catalog of 1921. Beautifully finished mahogany ends and brass rods. Originally advertised as designed to greatly increase the range of any of the receiving sets for experimental use. With 60 foot aerial it will respond to wave lengths up to about 800 meters. 3 1/2" square by 7 1/2" long. Assembled. P-M166 \$35.00

CATS WHISKERS

Similar to the Philmore cat's whiskers and others. Made of phosphor bronze. P-H415 \$2.25 pkg. 3



WIRELESS TRANSMITTER KIT

Now your antique radio can play some of the same programs it did when it was new! With your cassette tape player, phonograph or high output microphone, this one-tube transmitter becomes a miniature AM broadcasting station, patterned after the 1939 Zenith model S-7000 Wireless Record Player. Assemble on a 4 x 6 1/2" breadboard, all parts and instructions included. 2.0 lbs. K-488 \$32.95

POWER SUPPLY KIT FOR EARLY BATTERY RADIO

SPECIFICATIONS:

INPUT:	120V, 60 Hz.
"A" OUTPUT:	Adjustable and regulated 1.5 to 7.5 volts, 1.5 Amps.
"B" OUTPUT:	22, 45, 67, 90, and 135 volts regulated up to 50 mA.
"C" OUTPUT:	Adjustable, 0 to 22 volts. Regulated.

Kit includes transformer, rectifiers, capacitors, resistors, transistors, regulator I.C. and all hardware and white pine board. Easy to follow instructions for assembly. You need only a screwdriver and soldering iron. 3.0 lbs. **K-101A** **\$52.95**

BEGINNERS CRYSTAL RADIO KIT

Crystal radio kit is ideal for the beginning radio hobbyist. Comes complete with tuning coil that you get to wind, slider, germanium diode and earphone. **K-401** **\$10.95**

POWER SUPPLIES FOR EARLY BATTERY RADIOS

"A" Supply. Adapted specifically for A battery replacement by Antique Electronic Supply. Output 6 volts regulated $\pm 1\%$ up to 3 Amps. Supply up to 12 01A's. Adjustable 4 to 7 volts. Compact 4" x 5" x 2". Can be mounted inside your radio cabinet. With AC cord and built-in power switch. 3.0 lbs. **S-Z116** **\$69.95**

ONE TUBE RF (RADIO FREQUENCY) ANTENNA AMPLIFIER

Boosts the input signal of small receivers approximately 15 times. Operates .55 MHz to approximately 6.5 MHz. Compatible with other radio kits. Need only a screw driver, pliers and soldering iron to assemble. Includes instructions and all parts except for tube and batteries. Operates on 1.5V "C" size battery and 45V battery. Takes same tubes as

shown in K-416 description. 1.0 lb. **While supplies last.** **K-415** **\$26.95**

TWO TUBE AF (AUDIO FREQUENCY) HEADPHONE AMPLIFIER

Boosts the output of small receivers approximately 7 times (varies with tube selection, output load and B+ voltage). Compatible with other radio kits. Need only a screwdriver, pliers and soldering iron to assemble. Includes instructions and all parts except for tube, headphones and batteries. Uses 1A5, 1C5, 1T5, 3Q5, 1L4, 1U4, 1U5, 1S4, 3S4 or 3Q5 tubes (any two in combination (order separately)). Operates on 2 - 1.5V "C" size batteries and 45 to 90V battery. 1.0 lb. **(Recommended headphone P-A466 or other 2000 ohm headphone, order separately).** **K-416** **\$24.95**

CRYSTAL COVER

Glass crystal cover for Philmore and other crystal sets. 1" O.D. by 1 1/8" high. **P-D125** **\$9.95**

SPIDER WEB COIL FORM

Same as used in K-406. 3 1/2" dia. Made of press board. Has leg for mounting to radio base. **P-H500** **\$2.95**

PLUG-IN COIL FORMS

Wind your own coils with these brown plastic plug-in coil forms. 2 7/8" x 1 1/4" dia. Standard 5-pin base.

P-C211 **\$4.95**

CRYSTAL DIODE

Point contact germanium diode, ideal for crystal radio detectors.

1N34A	P-Q972	\$0.50
1N60	P-Q973	\$0.50

SHORT WAVE CRYSTAL RADIO KIT

Tune in world-wide signals from 3.0 to 14 Mhz on a crystal radio! Kit includes pre-drilled base and front panel board, air variable capacitor, germanium diode, coil form, knob, hook-up wire and hardware. 4 1/2" x 6 1/2" x 3 1/2", 1 lb. **(Antenna wire and earphone not included.)** **K-402** **\$24.95**

TAPPED COIL CRYSTAL RADIO KIT

Build a working crystal radio with great sensitivity and selectivity across the broadcast band. Kit includes pre-drilled base and front panel board, air variable capacitor, germanium diode, coil form, knob, hook-up wire and hardware. 4 1/2" x 6 1/2" x 3 1/2", 1.0 lb. **(Antenna and earphone not included).** **K-403** **\$24.95**

WORLD WAR II FOXHOLE RADIO KIT

Build an AM receiver using only a razor blade, pencil lead, coil and earphone! Contains all necessary parts, base and instruction book. **K-414** **\$12.95**

N.O.S. CRYSTAL DETECTOR

Early vintage high quality crystal detector assembly from Italy. Includes cat's whisker, galena crystal and stand with two 4 mm. dia. plugs on 2 cm centers. 0.3 lb. **Limited to stock on hand.** **P-M165** **\$17.50**

A.M. HI-FI TUNER KIT

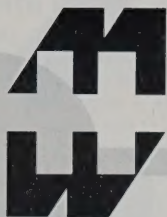
Nothing more than a Crystal Radio, our new A.M. Hi-Fi Tuner is a nice addition for the serious AUDIOPHILE. It's been a proven fact over the years, that a crystal radio for A.M. reception, delivers the upmost in fidelity. There is no power supply, etc. to introduce "foreign" noises, into the circuit. This "Three Stage/Dual Diode" assembly, reaches down and separates the stations, like no-other Crystal Radio circuit produced. This unit boasts a wide versatility in antenna and ground, so it will work most efficiently for your A.M. environment. The resulting audio output can be fed to a Hi-Fi amplifier or a high quality 2000 ohm double headphone. Easy to assemble, with an unfinished/unassembled pine cabinet. The unit is 11" long x 5 1/2" high x 6 1/2" deep. Weight is 3 pounds. **(Antenna and headphone not included).** **K-420** **\$59.95**

HIGH IMPEDANCE DOUBLE HEADSET

High quality 2000 ohm double headphone. Has black light weight plastic ear caps, with metal headband, plastic cord and 2 phone tips. Works great with crystal set or our one tube radio kit. 6 oz. **P-A466** **\$15.25**

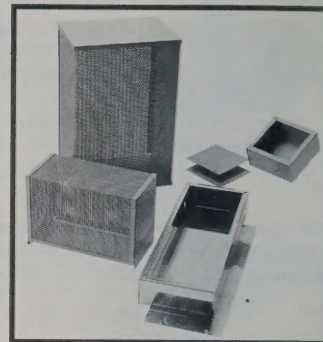
CRYSTAL EARPHONE

High impedance crystal earphone is very sensitive and works great with crystal radios. Has 3 ft. cord and miniature (3.5mm) plug, **P-A480** **\$2.50**



HAMMOND MANUFACTURING GENERAL PURPOSE STEEL & ALUMINUM CHASSIS BOXES

- Spot welded heavy duty construction chassis
- Steel boxes are painted ASA 61 grey baked enamel finish
- Aluminum boxes are natural finish
- Covers are punched with 4 holes - $\frac{3}{16}$ " dia.



CHASSIS BOXES - STEEL

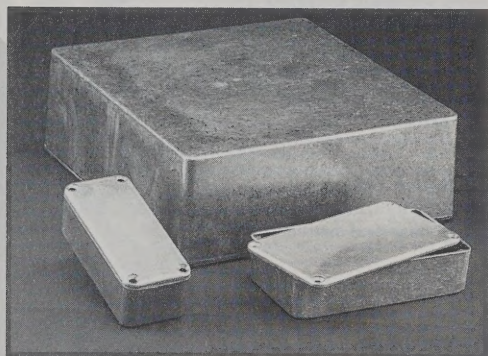
NOTE: Dimensions shown are exterior measurements.

CHASSIS BOX	PRICE	SIZE, INCHES	COVER PLATE	PRICE
P-H1441-8	\$7.90	6 x 4 x 2	P-H1431-8	\$4.00
P-H1441-12	\$8.60	7 x 5 x 2	P-H1431-12	\$3.90
P-H1441-16	\$11.30	10 x 6 x 2	P-H1431-16	\$6.00
P-H1441-18	\$11.95	13.5 x 5 x 2	P-H1431-18	\$6.35
P-H1441-22	\$19.65	12 x 8 x 2	P-H1431-22	\$8.45
P-H1441-32	\$26.85	17 x 10 x 3	P-H1431-30	\$8.95

STEEL CAGES

NOTE: Dimensions shown are exterior measurements.

CAGE NO.	SIZE, INCHES	PRICE
P-H1451-16	10 x 6 x 5.2	\$27.40
P-H1451-22	12 x 8 x 5.2	\$31.30
P-H1451-30	17 x 10 x 5.2	\$37.85



CHASSIS BOXES - ALUMINUM

NOTE: Dimensions shown are exterior measurements.

CHASSIS BOX	PRICE	SIZE, INCHES	COVER PLATE	PRICE
P-H1444-8	\$7.30	6 x 4 x 2	P-H1434-8	\$3.70
P-H1444-12	\$8.00	7 x 5 x 2	P-H1434-12	\$3.60
P-H1444-16	\$10.45	10 x 6 x 2	P-H1434-16	\$5.55
P-H1444-18	\$11.05	13.5 x 5 x 2	P-H1434-18	\$5.90
P-H1444-22	\$18.20	12 x 8 x 2	P-H1434-22	\$7.80
P-H1444-32	\$24.85	17 x 10 x 3	P-H1434-30	\$8.25

1590 Series Diecast Aluminum Enclosures

- Countersunk lid with machine screws into drilled and tapped holes
- Lap joint construction provides protection from dust and water
- Vibra finished, no sharp edges

All prices are 10% off of Hammond retail price. If we don't have the size you need, we can special order any Hammond product!!

SIZE(")	PART NO.	PRICE	SIZE(")	PART NO.	PRICE
3.63 x 1.52 x 1.07D	P-H1590A	\$6.30	7.39 x 4.72 x 3.06D	P-H1590E	\$18.45
4.38 x 2.40 x 1.07D	P-H1590B	\$7.20	7.41 x 7.41 x 2.50D	P-H1590F	\$24.80
4.70 x 3.70 x 2.06D	P-H1590C	\$10.55	1.98 x 1.84 x 1.07D	P-H1590LB	\$6.50
4.70 x 3.70 x 1.18D	P-H1590BB	\$9.35	4.72 x 4.72 x 3.54D	P-H1590V	\$19.80
7.39 x 4.72 x 2.06D	P-H1590D	\$17.25			

NEW OLD STOCK PROJECT BOXES

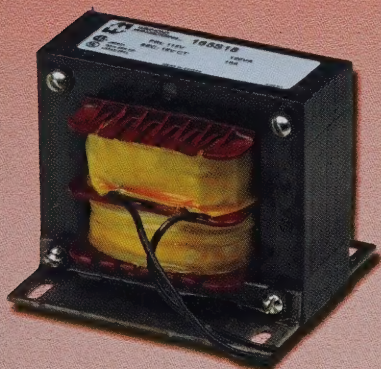
.040" aluminum chassis boxes with one open side (sorry, no cover plates).

Availability is limited to stock on hand

SIZE(")	PART NO.	PRICE	SIZE(")	PART NO.	PRICE
7" x 17" x 3"	P-H118	\$12.00	10" x 14" x 3"	P-H124	\$11.00
8" x 17" x 2"	P-H120	\$12.00	10" x 17" x 3"	P-H126	\$13.00



HAMMOND
MANUFACTURING™



- Tube Output
- High Voltage
- Filament
- Audio Matching
- Filter Chokes
- Isolation
- R.F. Chokes



Classic Transformers & Enclosures



Diecast Aluminum



Chassis

Hammond Mfg. is a world renowned manufacturer of quality transformers and enclosures. Antique Electronic Supply is an authorized stocking distributor. We can supply the full line of Hammond products, including special order items not shown in this catalog. Contact us for a complete Hammond catalog.

Duds & Logos

Fender®

FENDER TWO-TONED HATS

Blue/Black G-833 \$17.95
Khaki/Black G-834 \$17.95



FENDER
Black face
logo Amp Hat
G-843
\$18.00

Fender

Fender

FENDER KEY CHAINS

Black face logo G-838 \$7.50
Flat amp logo G-839 \$7.50
Tweed amp logo G-840 \$7.50

Fender

Fender

Tweed Amp Logo
S-M913 \$10.95

Fender Bassman

Tweed Bassman Logo
S-M914 \$10.95

Fender

Amplifier Logo Flat Brown
S-M911 \$14.25

Fender

Tweed Logo Black
S-M917 \$10.95

Fender

Logo Flat Black
S-M916 \$14.25

Fender

70's Small Logo (CBS)
S-M915 \$13.50

Fender

Amplifier Logo Blackface
w/Tail S-M912 \$11.75

FENDER "STRAT" CIRCLE T-SHIRT While supplies last
Fender "Strat" logo with large imprint on back. Available in black (shown) white and blue.

Black Large	G-832L	\$15.95
Black X-Large	G-832XL	\$15.95
White Large	G-831L	\$15.95
White X-Large	G-831XL	\$15.95
Blue Large	G-830L	\$15.95
Blue X-Large	G-830XL	\$15.95



NEW LOWER
PRICES

FENDER DIAMOND
T-SHIRT While supplies last

Front imprint with matching design on sleeve.
Available in gray (shown), white and black.

Black Large	G-827L	\$15.95
Black X-Large	G-827XL	\$15.95
Gray Large	G-828L	\$15.95
Gray X-Large	G-828XL	\$15.95
White Large	G-829L	\$15.95
White X-Large	G-829XL	\$15.95



Tube Bases

4 pin G-122 \$11.25/dozen
5&6 pin G-123 \$11.25/dozen

AES "Campy" Hat
G-825 \$8.50



CLEARANCE PRICE (While supplies last)!



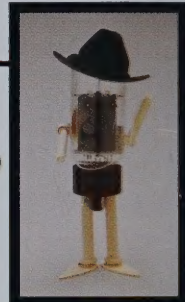
CAMPY SWEATSHIRT

High quality sweatshirt with our own "Campy" tube character embroidered on breast.

Large G-822L \$33.00
X-Large G-822XL \$33.00

Tube People
(A handmade original)

The cutest little things you've ever seen. Sure to be a collector's item. A great gift for a tube lover! Each of these handmade "IT'S A CAMPY™" originals has a personality of its own. No two are alike. Each comes with solid wooden display base. Sorry, no instructions or data sheets included.



THE FISHERMAN™

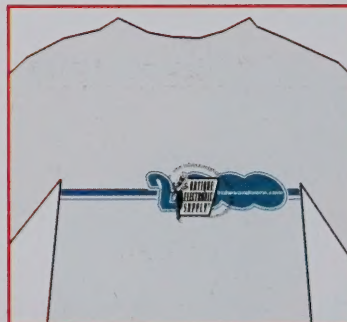
This guy is in complete disbelief that he just reeled in the big one. Maybe he's been out in the sun too long. Approx. 8" tall with a 3" square base. G-904 \$9.95

THE COWBOY™

Swinging a lasso with his 10 gallon hat and that goofy expression, he's one big dude! Better watch out little heifer! Approx. 8" tall with a 3" square. G-903 \$9.95

AES LOGO T-SHIRT

"Tube Dude" AES logo on grey T-shirt.
Large G-823L \$9.95
CLEARANCE PRICE (While supplies last)



LOGO APPEARS ON BACK

HANES
BEEFY-T

Y2K T-Shirt

G-836L\$	12.95
G-836XL	\$12.95
G-836XXL	\$14.95

Zenith T - Shirts



Black with green logo

large	G-817L	\$14.95
x-large	G-817XL	\$14.95
xx-large	G-817XXL	\$15.95



White with black logo		
large	G-816L	\$14.95
x-large	G-816XL	\$14.95
xx-large	G-816XXL	\$15.95

S E P T . 9 9 - A P R I L 2 0 0 0
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ANTIQUE ELECTRONIC SUPPLY



TUBES

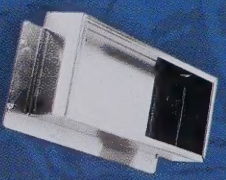
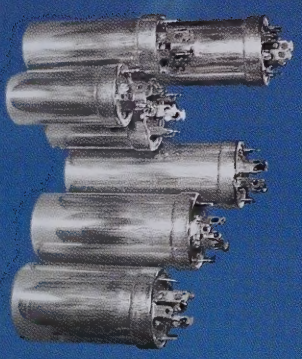
PARTS

SUPPLIES

BOOKS

SPEAKERS

TRANSFORMERS



6221 S. MAPLE AVE. TEMPE, AZ 85283

(480)820-5411 FAX(480)820-4643

FAX(800)706-6789



VIBRAPOD



One electron



M A Y . 2 0 0 0 - D E C . 2 0 0 0

w w w . t u b e s a n d m o r e . c o m

ANTIQUÉ ELECTRONIC SUPPLY

TUBES

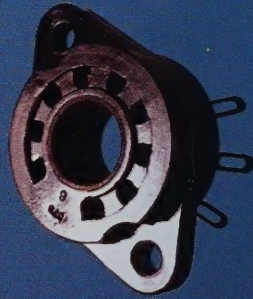
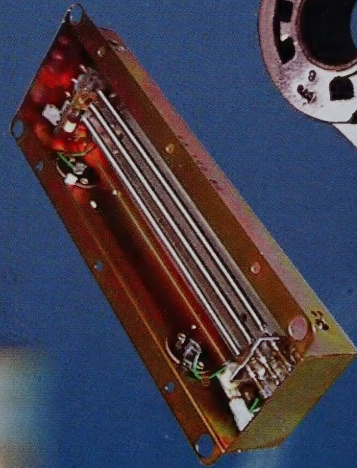
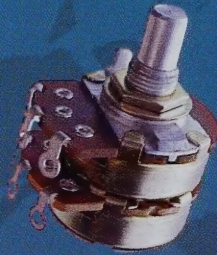
PARTS

SUPPLIES

BOOKS

SPEAKERS

TRANSFORMERS

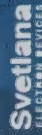
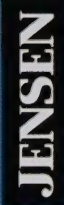


6221 S. MAPLE AVE. TEMPE, AZ 85283

(480)820-5411 FAX(480)820-4643

FAX(800)706-6789

Fender



ANTIQUE ELECTRONIC SUPPLY

Toll Free Fax (800) 706-6789 • Web site: www.tubesandmore.com • E-mail: info@tubesandmore.com

DATE _____

Phone () _____ Fax () _____ E-Mail _____

Country

SPECIAL INSTRUCTIONS

Method of Shipping (if not UPS) _____

Back Order out of stock items? ☐ Yes ☐ No

METHOD OF PAYMENT

☐ CREDIT CARD _____

CARD NUMBER _____

EXP. DATE _____

☐ C.O.D. _____

☐ Check/Money Order _____

SIGNATURE _____

MINIMUM ORDER \$10.00	
TOTAL FOR GOODS	\$ _____
SALES TAX (AZ Customers)	\$ _____
HANDLING CHARGE	\$ <u>2.50</u>
SHIPPING CHARGES	\$ _____
TOTAL	\$ _____

ORDERING INFORMATION

Phone orders are accepted from 8:00 AM to 5:00 PM (MST) Monday through Friday and 9:00 AM to 1:00 PM Saturday. (Saturday hours are subject to change, refer to our website or call for current Saturday hours). We accept MasterCard, Visa, Discover, and American Express. Please give us the name listed on the card, the complete card number and the expiration date, either by phone, fax, e-mail or mail. You may also mail a check or money order with your order. We can ship COD **by UPS only**. There is an additional \$5.50 COD fee for orders shipping UPS COD service. **All orders shipping COD require payment by cashier's check or money order unless payment by check has been arranged with us in advance.** **NOTE: Cash is no longer accepted by UPS on COD as a matter of UPS policy.**

Fax and e-mail orders are accepted at anytime 24 hours a day. Unless specifically requested, these orders will be filled and shipped **without acknowledgment**. Our domestic toll free fax number is (800) 706-6789. Our website address is www.tubesandmore.com. Our e-mail address is info@tubesandmore.com.

Our handling fee is \$2.50 on each order. This handling fee is waived for all **book only** orders of \$20.00 or more. We do our best to accommodate add-ons to orders; however, we charge an additional handling fee for add-ons and cannot guarantee it will be added to the original order. The customer assumes all responsibility for additional shipping charges if the add-on ships separately.

Due to the nature of the types of products we supply, **all prices and availability are subject to change.**

If you have ordered from us before, please identify yourself by your customer code for faster service (all e-mail customers, please provide your personal password along with your customer code).

DOMESTIC ORDERS

We ship continental United States orders by UPS ground service unless otherwise requested. Orders shipping to Hawaii, Alaska, and Puerto Rico can only be sent by mail or by UPS priority service (2nd Day or Next Day). For shipping charges, instructions, and approximate delivery times, please see the chart in the back of the catalog. There is a \$10.00 minimum per order.

For domestic shipments, UPS Next Day Air, 2nd Day Air, 3 Day Select and other types of priority delivery are available upon request. These orders will be shipped the same day they are received **if phoned, faxed or e-mailed by noon (MST).**

INTERNATIONAL ORDERS

We ship international orders by either Air Parcel Post or Surface Parcel Post, unless other services are requested. We ship by Air Mail to Canada unless you specify otherwise at the time of your order. We recommend UPS as our primary carrier for express services. Please specify which mode of shipment you prefer.

Payment must be made in US funds, either by credit card, bank draft or International Money Order. Wire transfers can be accepted for a \$40.00 fee. We cannot ship COD outside the United States. There is a \$25.00 minimum order.

If possible, please provide us with either your phone, fax or e-mail information.

OUT-OF-STOCK ITEMS

While we endeavor to stock what we catalog, we carry many obsolete, hard-to-find and custom manufactured items, and we cannot guarantee availability. If an ordered item is not in stock and we expect to have it again, it will be back ordered and so noted on your invoice unless otherwise requested. It will be invoiced and shipped when it becomes available. Shipping/handling charges will be adjusted so that you are not penalized by the additional cost of making two shipments. If an item is ordered that cannot be back ordered (i.e. most tube stock), or we cannot insure availability, it will be canceled from the order and so noted on the invoice. If an item has -NLA- (no longer available) in the description it means we cannot locate the item and are no longer able to provide it. If -NCA- (not currently available) appears in the description it means we are looking for the item and you may be able to order it in the future.

MERCHANDISE RETURNS

Should it become necessary to return merchandise for exchange or credit please see our guarantee on page one of the catalog. Please write, fax, e-mail or call with a reason for the return and you will be given a Return Authorization (RA). **Customer service is available by phone from 8am-10am and 2pm-4pm, Mon.-Fri.** All returns should be sent promptly; all returns must be received by us within 30 days or the RA will become invalid. The RA number must be placed on the outside of the package being returned in order to assure that your return is handled in a timely manner. We reserve the right to charge a restock fee where no evidence of product failure exists.

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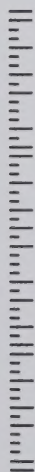
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Fold and Tear on Dotted Line
Before Mailing

ANTIQUE ELECTRONIC SUPPLY

P.O. BOX 27468

Tempe, Arizona USA 85285-7468



Place
Stamp
Here

Be sure to:

- Sign and enclose your check, or complete charge card information.
- Print your name, address and zip clearly.
- Print part numbers and product description clearly. Thank you for your order.

MAY•00

JUN•00

JUL•00

AUG•00

Su	M	T	W	Th	F	S
	1	2	3	4	5	(6)
7	8	9	10	11	12	13
14	15	16	17	18	19	(20)
21	22	23	24	25	26	27
28	29	30	31			

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			1	2		(3)
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11	12	13	14	15	16	(17)
18	19	20	21	22	23	24
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30	31					

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6	7	8	9	10	11	12
13	14	15	16	17	18	(19)
20	21	22	23	24	25	26
27	28	29	30	31		

- Saturdays open
Closed - May 29 (Memorial Day)

Closed - Tuesday July 4th

Closed - Physical Inventory
Aug 2 thru Aug 6

SEPT•00

OCT•00

NOV•00

DEC•00

Su	M	T	W	Th	F	S
	1	2				
3	4	5	6	7	8	9
10	11	12	13	14	15	(16)
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Su	M	T	W	Th	F	S
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8	9	10	11	12	13	14
15	16	17	18	19	20	(21)
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29	30	31				

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12	13	14	15	16	17	(18)
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Su	M	T	W	Th	F	S
					1	(2)
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10	11	12	13	14	15	(16)
17	18	19	20	21	22	23
24	25	26	27	28	29	30
						31

Closed - Sept 4th Labor Day

Closed - Nov 23 thru Nov 26

SEPT.99							OCT.99							NOV.99							DEC.99								
Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S		
				1	2	3	4					1	2				1	2	3	4	5	6				1	2	3	4
5	6	7	8	9	10	11	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	
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26	27	28	29	30				24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31		
								31																					

# - Saturdays open		Closed - Nov 25 thru Nov 28	Closed - Dec 24 thru Jan 2

JAN.00							FEB.00							MAR.00							APR.00						
Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S
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23	24	25	26	27	28	29	27	28	29					26	27	28	29	30	31		23	24	25	26	27	28	29
30	31																				30						

PHILCO

Philco Cathedral

Front & back view of a Philco on cream colored shirt.

large	G-804L	\$14.50
x-large	G-804XL	\$15.50



Coffee Mugs



Antique 11oz.
G-821 \$3.50

Philco 12oz.
G-436 \$7.95

Nipper 12oz.
G-435 \$7.95

Fender Logo
G-844 \$7.00

Fender Ashtray
G-845 \$8.50

Nipper Shirts

3 colors, each available in large or extra large



White
large G-730L \$14.50
x-large G-730XL \$14.50



Black
large G-732L \$16.50
x-large G-732XL \$16.50

NEW LOWER PRICE

Also available!... Nipper Sweatshirts!
available in white only.

large G-735L \$18.95
x-large G-735XL \$18.95

Red
large G-731L \$16.50
x-large G-731XL \$16.50



RCA Tube Diagram Shirts



RCA TUBE

DIAGRAM T-SHIRT

Ash color T-shirt. Back has cut-out drawing of RCA tube with a diagram of different tube components. Vacuum Tube Valley logo on front. X-Large Only. G-835XL \$16.95



Nipper Dog



Banks (While supplies last)

6 1/2" high G-722B \$13.95
9" high G-746B \$37.95
12" high G-747B \$47.95

Figurines

3" high G-744 \$6.50
6 1/2" high G-722F \$14.95
9" high G-746F \$37.95
12" high G-747F \$49.95

Nipper Music Box

G-748 \$34.95



Magnet 2" x 3"
G-M80 \$3.75



Stuffed Nippers

6" high G-767 \$9.95
12" high G-768 \$19.95



Nipper Salt & Pepper Shaker
G-147 \$12.50



Nipper Diary/Notebook

6 1/4" x 8 1/4" G-758 \$4.95

TELEGRAPH KEYS

High quality, gold plated brass keys on olive wood base. Handles and knobs are teak. From Spain. Perfect gift for the HAM in your life!

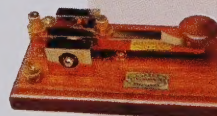
Dual - Paddle & Key
G-KEY3 \$135.00



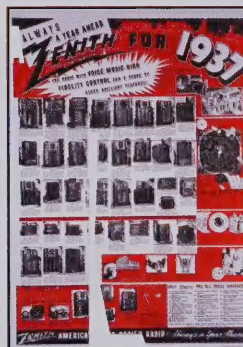
Iambic Paddle Keyer
G-KEY2 \$85.00



Deluxe Straight Key
G-KEY1 \$75.00



Posters



B-P105
25" X 38"
\$16.95

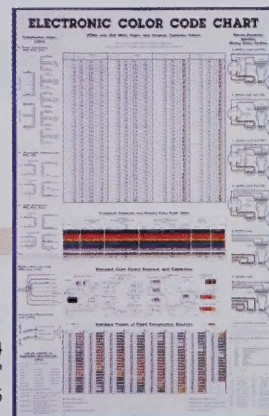
B-P102 24" X 36" \$4.95



G-759 \$4.95
about 13" square



B-P101
20" X 26"
\$10.95



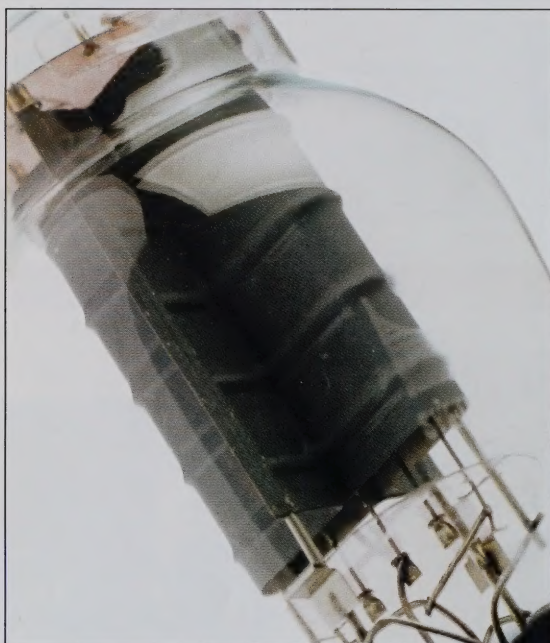
B-P104
25" X 38"
\$8.95



Svetlana

ELECTRON DEVICES

Svetlana offers a full line of vacuum tube products including audio tubes, amateur radio tubes, power tubes as well as several sockets and connectors. Founded in St. Petersburg, Russia in 1889, Svetlana was at the forefront of the vacuum tube industry. Maintaining a leading position, Svetlana's quality and superior performance has become the industry benchmark and commands high praise from leading trade publications worldwide. Consider also that Svetlana's tubes are backed by the most generous warranty in the industry. Just look for the Svetlana trademark and the Svetlana purple ceramic to know you've got the best!



Power Tubes

Svetlana has been a leading power grid tube supplier since it first developed electron devices in 1928. Svetlana provides rugged power tubes for both OEM and end-user applications. Svetlana offers the full 3CX2500, 3CX10000, 3CX15000, 4CX5000, and 4CX15000 lines.

Please call for price and availability.

Audio Tubes

Svetlana designs and builds audio tubes modeled after the original American and European designs.

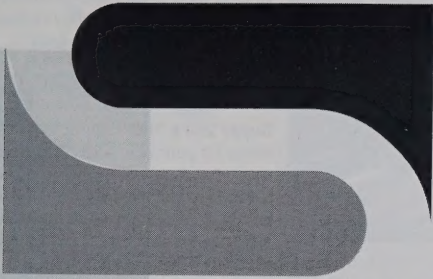
Strict performance standards and quality control give these tubes the sound you want and the quality you expect from Svetlana.



Amateur Radio Tubes

Svetlana is dedicated to servicing the radio amateur. They realize amateurs play an integral role in communications technology development. Their power tubes for amateur radio are designed and built to rugged Russian military standards.





Svetlana

ELECTRON DEVICES

Amateur Radio Tubes

Tube	Socket (Our Part #)	Connector (Our Part #)	Price
572B	P-ST4-191	PC1A	\$69.95
811A	P-ST4-191	PC1A	\$21.95
812A	P-ST4-191	PC1A	\$35.00
8560AS		P-SAC-1	\$120.00
4CX250B	P-ST8-SK2A	P-SAC-1	\$99.00
4CX250BC	P-ST8-SK2A	P-SAC-1	\$105.00
4CX250BT	P-ST8-SK2A	P-SAC-1	\$125.00
4CX250R	P-ST8-SK2A	P-SAC-1	\$125.00
4CX400A	P-ST8-SK2A	P-SAC-1	CALL
4CX800A	P-ST8-SK1A		CALL
4CX1600B	P-ST-SK3A	P-SAC-2	CALL

Audio Tubes

Tube	Socket (Our Part #)	Connector (Our Part #)	Price
6AS7G			\$17.95
6BM8			\$11.50
6D22S	P-ST9-509	P-SG116	\$4.00
6L6GC			\$14.95
6N1P			\$4.75
300B	P-ST4-191		\$149.00
6550C			\$27.95
EF86/6267			\$13.95
EL34			\$14.95
EL509/6KG6	P-ST9-509	P-SG116	\$32.00
SV572-3	P-ST4-191		\$56.00
SV572-10	P-ST4-191		\$56.00
SV572-30	P-ST4-191		\$56.00
SV572-160	P-ST4-191		\$56.00
SV811-3	P-ST4-191		\$33.00
SV811-3A	P-ST4-191		\$33.00
SV811-10	P-ST4-191		\$33.00
SV83			\$4.75
3CX300A1	P-ST8-SK2A	P-SAC-1	\$99.00

Svetlana's complete line of tubes, whether for audio, amateur radio, broadcasting or industry are of the highest quality obtainable. Many are designed as exact replacements for western tube types, while others are of new design. In either case, Svetlana's commitment to excellence provides you with the strongest warranty available in the industry. Call us for warranty details or for data sheets on any of the tubes listed here.

When ordering please specify that you are ordering Svetlana tubes. Be sure to use our complete part number for Svetlana tubes, which can be found in the tube listing beginning on page 4. Our part numbers for Svetlana tubes end in SVET (except for SV572 and SV811 series which have part number listed below). *Sorry, no chimneys available.*

Sockets

OUR PART NO.	PRICE
P-ST-SK1A	\$65.00
P-ST8-SK2A	\$10.00
P-ST-SK3A	\$150.00
P-ST4-191	\$3.50

Connector Clips

The Svetlana AC line of connector clips are for use with tubes as shown on this page. They are suitable for connection to the anode and/or grid cap of the tube. Each is a silver-plated spring clip. The user should select appropriate hardware to mate with wire or copper straps depending on the application.

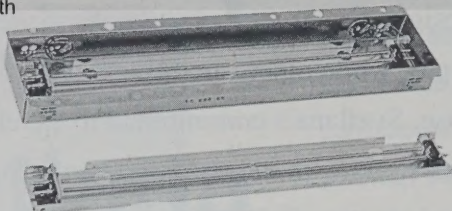
Part No.	Appx. Dia.	Price
P-SAC-1	0.565"	\$2.60
P-SAC-2	0.815"	\$5.70
P-SAC-3	0.875"	\$11.00
P-SAC-4	0.453"	\$2.60
P-SAC-5	0.570"	\$5.70
P-SC-509	0.25"	\$8.50

For more Svetlana products and information, visit their web site at www.svetlana.com

Accutronics®

Reverb Tanks

We now offer world famous Accutronics brand reverb tanks in 3 of the most popular styles with 12 different models to choose from. Get the warm, true sound that only spring reverb can provide.



Type 4 The industry standard for years, the Type 4 is still manufactured using the original Hammond design. Four counter wound and coupled springs deliver superior mechanical performance and the classic sound that helped make the Fender Twin Reverb amps famous. 16 1/4" long x 4 3/8" wide.

4AB3C1B 8Ω input, 2,250Ω output, long delay, insulated input, grounded output connectors, horizontal, open side down mounting. Used in Fender, Marshall and Ampeg amps. **P-R4AB3C1B \$17.95**

4BB2A1B 150Ω input, 2,250Ω output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting. Used in Music Man amps. **P-R4BB2A1B \$17.95**

4BB3C1B 150Ω input, 2,250Ω output, long delay, insulated input, grounded output connectors, horizontal, open side down mounting. Used in SLM amps. **P-R4BB3C1B \$17.95**

4EB2C1B 600Ω input, 2,250Ω output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting. Peavy solid state replacement. **P-R4EB2C1B \$17.95**

4FB3D1B 1,475Ω input, 2,250Ω output, long delay, insulated input, insulated output connectors, horizontal, open side down mounting. General replacement. **P-R4FB3D1B \$17.95**

Type 8 Designed for applications in which overall sound quality is important and a compact package is required. Small in size, this three string reverb approaches the rich textural quality of larger reverb units. 9 1/4" long x 3 3/8" wide.

8AB2A1B 10Ω input, 2,575Ω output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting. Used in Mesa Boogie amps. **P-R8AB2A1B \$16.50**

8BB2A1B 190Ω input, 2,575Ω output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting. Used in SLM amps. **P-R8BB2A1B \$16.50**

8DB2C1D 310Ω input, 2,575Ω output, medium delay, insulated input, grounded output connectors, vertical connector down mounting. Used in Marshall amps. **P-R8DB2C1D \$16.50**

8EB2C1B 800Ω input, 2,575Ω output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting. Used in Fender, Peavy, Music Man amps. **P-R8EB2C1B \$16.50**

Type 9 Six springs, counter wound, coupled and placed in parallel, combine to create the fullest, richest reverb effect throughout the full range of musical sound. Ideally suited for keyboard, sound reinforcement and pedal steel applications. 16 1/4" long x 4 3/8" wide.

9AB2C1B 10Ω input, 2,575Ω output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting. Used in Fender, Mesa Boogie amps. **P-R9AB2C1B \$19.50**

9AB3C1B 10Ω input, 2,575Ω output, long delay, insulated input, grounded output connectors, horizontal, open side down mounting. Used in Fender amps. **P-R9AB3C1B \$19.50**

9FB2A1C 1,928Ω input, 2,575Ω output, medium delay, grounded input, grounded output connectors, vertical connector up mounting. Used in Fender, Peavy, Music Man amps. **P-R9FB2A1C \$19.50**



wear without compromising tone. Original equipment on all U.S. made Fender electric guitars. Ball end.

Original 150's If you're trying to capture the original vintage tone of pure nickel wound strings, string up a set of Original 150's! They're pure Fender Tone through and through! Ball end.

.010 - .046 Regular **S-S150R \$5.95**
.009 - .042 Lite **S-S150L \$5.95**

Super 250's The "high-octane" nickel plated steel string for your electric guitar. With a pure steel wrap, the magnets in your pickups use the whole string (not just the core) and transform the energy into high output bursts of sound. The nickel plating enhances feel and reduces "string squeak" and fret

.010 - .046 Regular **S-S250R \$5.95**
.009 - .042 Lite **S-S250L \$5.95**

FENDER AMP REPLACEMENT KNOBS

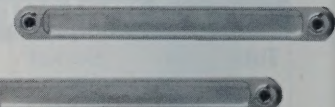
Genuine Fender amps knobs, skirted with 0-10 numbering. Sold in packages of 6. **P-K314 \$17.95**



FENDER CHASSIS STRAPS

Available in three sizes.

small **P-H264S \$7.95**
medium **P-H264M \$7.95**
large **P-H264L \$7.95**



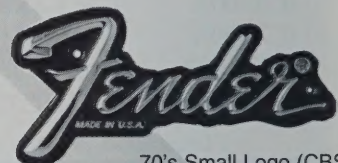
FENDER TILT BACK LEGS

Available in three sizes.

14" **P-H265S \$29.95**
16" **P-H265M \$39.95**
19" **P-H265L \$45.95**



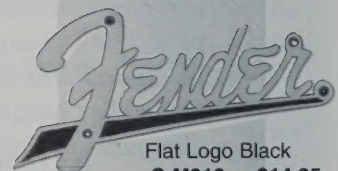
Amplifier Logo Blackface
w/ Tail **S-M912 \$11.75**



70's Small Logo (CBS)
S-M915 \$13.50



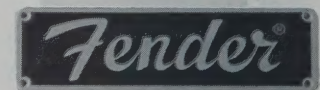
Tweed Amp Logo
S-M913 \$10.95



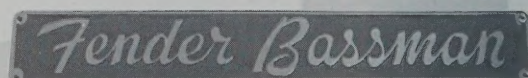
Flat Logo Black
S-M916 \$14.25



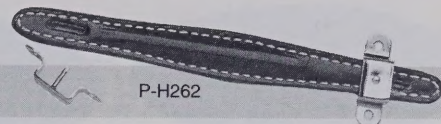
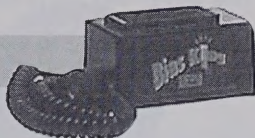
Amplifier Logo Flat
Brown **S-M911 \$14.25**



Tweed Logo Black
S-M917 \$10.95



Tweed Bassman Logo
S-M914 \$10.95



REPLACEMENT HANDLES

High quality replacement handles for vintage Fender amps. Will work on other amplifiers as well. Includes mounts and screws.

Black strap with silver caps	P-H261	\$5.50
Black strap with black caps	P-H261B	\$5.50
Brown strap with caps	P-H260	\$5.50
Brown leather-raised	P-H262	\$7.95
Brown leather-flat	P-H263	\$7.95

P-H263
P-H260
P-H261
P-H261B

CABINET CORNERS

Chrome with lip, as used on Fender. Sold individually.

P-HHR2040 \$1.50

Plastic, Small chevron stacking corners, 4 mm countersunk holes. Sold individually.

P-H266 \$1.00

5881 TUBE RETAINER

For use with guitar amps and applications where tube is suspended upside down in chassis.

S-H141

\$1.25

While supplies last...Octal tube retainer. Grips tube base with "teeth" to securely hold tube in place. For use with octal sockets with 1 1/2" mounting centers. Sold in package of 2.

S-H142

\$1.00

GUITAR MAINTENANCE KIT A complete maintenance kit in a durable rip-stop pouch that is flexible enough to fit in most guitar cases. Kit includes string winder, picks, emergency strap locks, hex wrenches, wire cutters, screwdriver with standard and phillips head (plus awl), guitar polish and lint-free flannel polish cloth. Don't get stuck without one! While supplies last.

S-CGMK1 \$34.95

REDUCED PRICE!

RELAMPABLE INDICATOR LIGHT

Relampable front panel indicators accept a variety of T-2 and T-3 1/4 miniature bayonet lamps. Two colors of fluted dome lens available, three colors of jeweled lens available. Order separately from lamp. 1/8" chassis hole.

Lamp holder	P-L110	\$3.95
Fluted dome - red	P-L111	\$1.75
Fluted dome - green	P-L112	\$1.75
Jeweled Red	P-L115	\$2.25
Jeweled Green	P-L116	\$2.25
Jeweled Amber	P-L117	\$2.25

GUITAR CHICKEN FEET

screw included Black P-K307 \$0.50

GUITAR AMP CASTERS

Heavy duty swivel caster for use on Fender and other amps. 2" diameter wheel supports 44 lbs. Can be purchased with or without metal socket.

Caster & Socket
P-HW01S \$5.95

Castor only
P-HW02 \$4.50

8 PIN OCTAL TUBE SOCKET UNIVERSAL CHASSIS MOUNT

Ceramic socket can be top mounted or bottom mounted, using unique ring mount in 1 1/2" chassis hole. Great replacement for Fender, Marshall and others.

P-ST8-801

\$2.50

SPEAKER GRILLS

Metal grills have flat black finish with rubber edge trim. Mounting brackets are included.

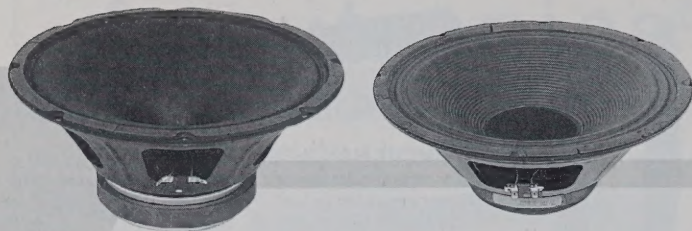
8"	P-HSG008	\$4.00
10"	P-HSG010	\$4.00
12"	P-HSG012	\$5.00
15"	P-HSG015	\$7.00

TOLEX ADHESIVE

3M SUPER 77 spray adhesive is the ideal adhesive for bonding tolex (or any other cloth, foil, felt, paper, etc.) to plastics, painted or unpainted metals, wood, hardboard and many other materials. Provides high coverage (over 160 sq. ft. per can), faster, more aggressive tack, longer bonding range and lower soak-in. Two spray tips are provided, one for large bonding areas and the other for smaller bonding areas.

16% oz. aerosol can. S-F315 \$10.25

See inside front cover for grill cloth and cabinet coverings! Also see our color section for information on guitar shirts and hats!



MUSICAL INSTRUMENT SPEAKERS Full range re-placement speakers for guitar amplifiers. For rugged, high quality applications we carry Kendrick "Blackframe" speakers. The Kendrick 8" speaker is ideal for replacing the Fender Champ.

MFG.	SIZE(")	IMP.(Ω)	WATTS	PART NO.	PRICE
Kendrick	8	4	8	P-A701	\$55.00
***	10	8	50	P-A704	\$29.95
Kendrick	10	8	20	P-A702	\$75.00
***	12	8	75	P-A705	\$39.95
Kendrick	12	8	80	P-A703	\$119.00
***	15	8	100	P-A706	\$49.95

***MADE IN THE USA. SAME SPEAKERS WE'VE ALWAYS HAD!



5" midrange
1.1 lbs.

8" woofer
1.6 lbs.

2" tweeter
0.3 lbs.

3-WAY SPEAKER SET

Includes woofer, midrange and tweeter shown. Branded "Pilot Audio". Weights shown are speaker weights, *not* magnet weights. 8 ohm speakers. No other specifications available. **P-AS852 \$12.95**



LOOSE REPLACEMENT SPEAKERS (While supplies last)

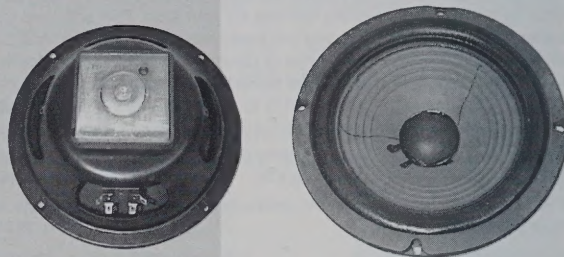
High quality, permanent magnet. For electro-dynamic speakers we suggest substituting a 5 or 10 watt wirewound resistor of approximately the same resistance as the old field coil. For output transformers, see page 18.

SIZE & SHAPE	OHMS	WATTS	PART NO.	PRICE
4" square frame	4	?	P-A599	\$5.95
4" square frame	8	1	P-A600	\$5.95
2" x 6" oval frame	8	1	P-A26-8A	\$1.95
2" x 3 1/2" oval frame	8	1	P-A2375-8A	\$1.00
3" x 5" oval frame	3.2	1.5	P-A35-3A	\$2.00
3 1/2" round frame	3.2	4	P-A375R-32A	\$1.00
3 1/2" x 6" oval frame	3.2	?	P-A6375-3A	\$3.00
6" pin cushion frame	8	10	P-A602	\$6.95
6" x 9" oval frame	4	8	P-A69E8C	\$12.50
8" round frame	8	10	P-A603	\$16.95
2" x 6" oval Pioneer	3.2	1	P-A26-3A	\$3.00
5" pin cushion frame	8	3	P-A604	\$6.95
4 1/4" pin cushion frame	?	?	P-A606	\$4.50

P-ACTS03

3" Tweeter, CTS, 8 Ω, 5 oz. ceramic

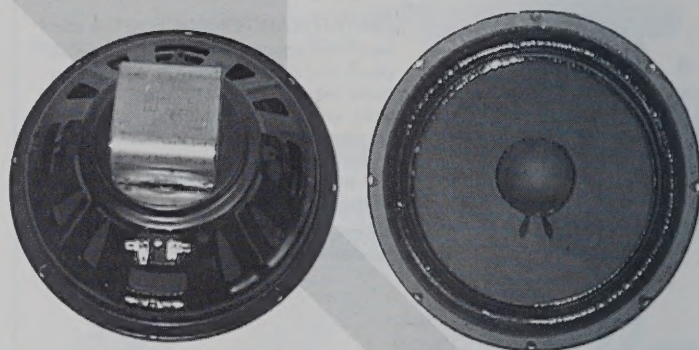
\$5.00



P-ACTS08

8" CTS, 8 Ω, 10 oz. ceramic

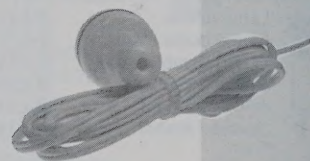
\$9.00



P-ACTS10

10" CTS, 8 Ω, 10 oz. ceramic

\$12.00



DYNAMIC EARPHONES

Dynamic earphones for use in transistor radio and other applications.

~500 ohm resistance, 3.5 mm plug

P-A482

\$1.00

~15 ohm resistance, no plug

P-A483

\$1.00

See page 33 for crystal earphones



HIGH IMPEDANCE DOUBLE HEADSET

High quality 2000 ohm double headphone. Has black light weight plastic ear caps, with metal headband, plastic cord and 2 phone tips. Works great with crystal set or our one tube radio kit. 6 oz. **P-A466 \$15.50**

The Jensen 'P' series, originally designed in the late 1940's and early 1950's, features highly efficient alnico magnets and the use where applicable of sealed cones. Alnico magnets ensure long life and high efficiency coupled with the obvious advantages of lighter weight and smaller overall dimensions. Seamed cones give that true vintage sound. The Jensen 'P' series is therefore one of the most important contributions to Rock and Roll sounds as we know them

today. The net result is pure vintage tone loved then and now by guitarists throughout the world.

The Jensen 'C' series provides additional tone choice coupled with the advantages of lower cost ceramic magnets. Originally developed in the 1960's to meet the ever increasing demands of the emerging pop music industry, the 'C' series has remained influential ever since.

JENSEN

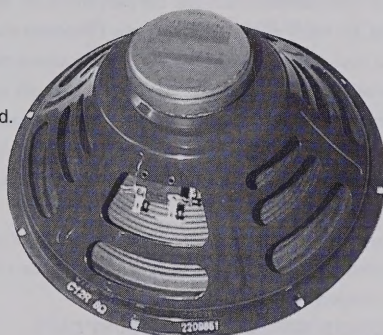
SPEAKERS

C series

C10Q Smooth vintage tone with clear articulate sound.

Nominal Overall Dia:	259 mm (10.2")
Nominal Voice Coil Dia:	32 mm (1.25")
Magnet Weight:	426 g (15 oz)
Magnet:	Ceramic
Rated Power:	35 W
Musical Power:	70 W
Nominal Impedance:	8 ohms
Sensitivity @ 1W, 1m:	95.2 dB

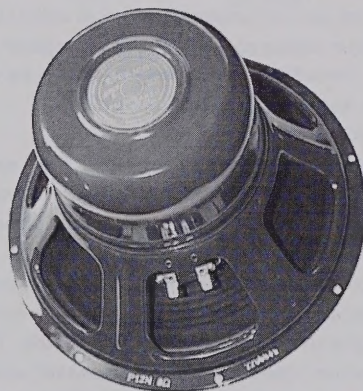
P-AC10Q \$50.00



C10R Sweet sounding 10" speaker ideal in 1 x 10 or 2 x 10 configuration for those great 1960's sounds.

Nominal Overall Dia:	259 mm (10.2")
Nominal Voice Coil Dia:	25 mm (1")
Magnet Weight:	270 g (9.5 oz)
Magnet:	Ceramic
Rated Power:	25 W
Musical Power:	50 W
Nominal Impedance:	8 ohms
Sensitivity @ 1W, 1m:	94.7 dB

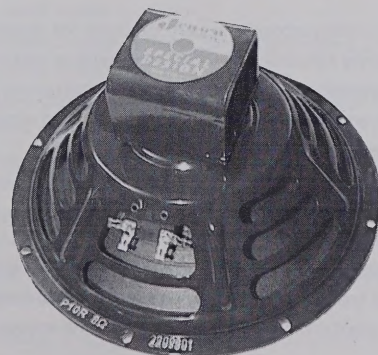
P-AC10R \$42.00



C12R This affordable speaker offers vintage performance on a budget, whilst still retaining the musicality for which Jensen is famous.

Nominal Overall Dia:	306 mm (12.1")
Nominal Voice Coil Dia:	25 mm (1")
Magnet Weight:	270 g (9.5 oz)
Magnet:	Ceramic
Rated Power:	25 W
Musical Power:	50 W
Nominal Impedance:	8 ohms
Sensitivity @ 1W, 1m:	93.8 dB

P-AC12R \$50.00



P series

P12N This 12" speaker is the embodiment of vintage tone in both clean & distortion modes. Without a doubt it is the classic 12" Alnico speaker. Appearing first in the 1950's, it is the lead guitar speaker from which all others have taken their roots

Nominal Overall Dia:	307 mm (12.1")
Nominal Voice Coil Dia:	38 mm (1.5")
Magnet Weight:	355 g (12.5 oz)
Magnet:	Alnico
Rated Power:	50 W
Musical Power:	100 W
Nominal Impedance:	8 ohms
Sensitivity @ 1W, 1m:	98.4 dB

P-AP12N \$228.00
P-AP12NB with bell cover \$268.00

P10R The fullness of tone for virtually any application makes the P10R the most balanced & versatile 10" guitar speaker in the world. In clean mode the P10R is punchy & full. In distortion mode its punchy bass and horn-like midrange make it ideal for sustained blues & scorching rock solos. It is simply the best!

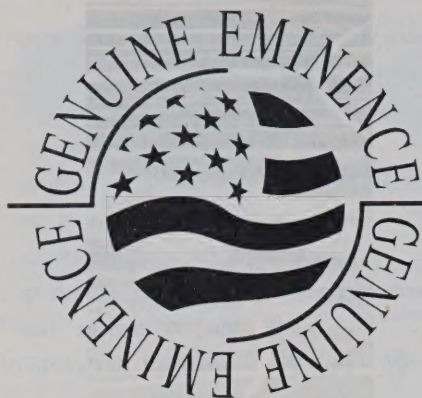
Nominal Overall Dia:	259 mm (10.2")
Nominal Voice Coil Dia:	25 mm (1")
Magnet Weight:	200 g (7 oz)
Magnet:	Alnico
Rated Power:	25 W
Musical Power:	50 W
Nominal Impedance:	8 ohms
Sensitivity @ 1W, 1m:	95.4 dB

P-AP10R \$90.00

P12R This classic 12" speaker has penetrating highs and wonderful clarity of tone.

Nominal Overall Dia:	306 mm (12.1")
Nominal Voice Coil Dia:	25 mm (1")
Magnet Weight:	200 g (7 oz)
Magnet:	Alnico
Rated Power:	25 W
Musical Power:	50 W
Nominal Impedance:	8 ohms
Sensitivity @ 1W, 1m:	93.9 dB

P-AP12R \$99.00



Building over 2 million loudspeakers a year, Eminence Speaker Corporation is now the Number 1 loudspeaker manufacturer in the world. They have produced loudspeakers for over 30 years and have a manufacturing capacity of over 10,000 speakers per day and growing. There are now over 5,000 unique loudspeaker specifications on file. No one knows more about loudspeakers. Antique Electronic Supply is proud to be a full line Eminence distributor. We can provide you with any Eminence product you might need.

If you have listened to live music,
you most certainly have listened to

• EMINENCE •

POWER HANDLING

The power handling capabilities of Eminence loudspeakers depend on many variables beyond their own physical and mechanical properties. Amplifier design, nature of signal, cabinet volume and the crossover employed can reduce or extend the performance of a loudspeaker. Nominal power ratings are not absolute and we recommend trials with loudspeakers rated both lower and higher than anticipated.

LOUDSPEAKER GROUPS

The Genuine Eminence loudspeaker range is grouped by nominal power handling: all Eminence Alpha models are nominally rated at 100Wrms, Eminence Beta models at 150Wrms and so on. A "pro" suffix indicates a professional die-cast aluminum basket.

EMINENCE BASKETS

The choice between pressed steel and die-cast aluminum is often perceived as a matter of cost or weight. In fact, for many applications a sturdy Eminence steel basket is adequate. However, the advantages of cast aluminum are greater rigidity, superior aesthetics and, since aluminum does not conduct the magnetic field out of the gap, the 'motor' strength is higher and the stray magnetic field lower. The black epoxy-acrylic paint, used on every Eminence loudspeaker basket covers the entire surface of the basket including the magnet gap and its thickness can be precisely controlled to less than one thousandth of an inch (remember that consistency!). Electrocoat painting is economical and extremely environmentally friendly too.

The technique is far superior to zinc-plating, favored by other manufacturers, which only protects underlying steel by first corroding itself. The effect of corrosion introduces an unpredictable variable and, when no zinc remains, allows the steel to corrode.

EMINENCE CONES, SURROUNDS AND DUST CAPS

The cone is usually the most important contributor to the subjective 'sound' of a loudspeaker. Eminence engineers probably have more experience with cone responses than anyone else on earth. This is an area where their ears and judgement are just as useful as pure mathematics. Combinations of paper cones with paper, cloth or santoprene surrounds together with variations in weight, strength and density are available. While the dust cap principally protects the voice coil and magnet gap area, it also contributes to the 'sound' that is uniquely Eminence.

EMINENCE VOICE COILS

Eminence Voice Coils are the finest in the world with a specially formulated Kapton polyimide film, developed by DuPont to Eminence specifications. This material prevents excessive heat at the cone apex so thermal failure is virtually eliminated. An Eminence loudspeaker's resilience to user error or abuse is extraordinary.

Although mechanical factors enter the equation, power handling is largely determined by the voice coil diameter. Typically a large voice coil provides greater surface area for better heat dissipation (heat caused by higher currents being fed into the voice coil). Eminence produces a range of seven voice coil diameters from 1" to 4" with 1-layer "edgewound" and 2-, 4- or dual 2-layer coils. Special polyimide adhesives, together with the special Kapton, mean that simply increasing voice coil size to increase power handling may not be necessary.

SPIDERS

The spider's main purpose is to keep the voice coil aligned perfectly in the magnet gap as it moves up and down while simultaneously acting as a spring to restore the voice coil to its 'neutral' position. Spider material technology is a science of its own as high power handling (a firm spring action) may appear to conflict with sensitivity (a delicate, responsive spring action). Whatever the suspension criteria, no lateral movement can occur.

TERMINALS

Eminence uses three terminal types:

- 0.205" spade connectors
- gold or silver colored push-button terminal with 4mm wire holes
- a five-way, knurled finish, binding post terminal with 5mm wire holes.

Use of the latest crimp-on connections avoids the environmental hazards of solder use.

Ask for your
FREE Eminence
Catalog with
any Antique
Electronic
Supply order!

EMINENCE

s p e a k e r s

Antique Electronic Supply is a full line distributor of Eminence Products. We stock the speakers listed below, however, if there is an Eminence product that you would like that you do not see, let us know and we will special order it for you at no extra cost. Call for quotes.

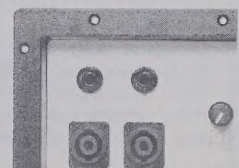
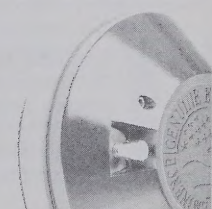
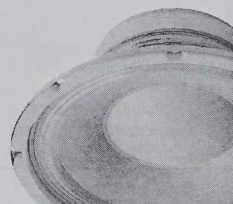
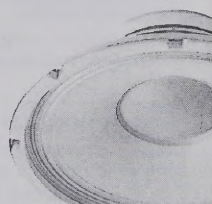
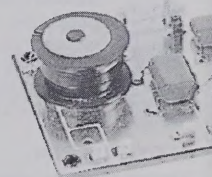
SERIES	MODEL#	SIZE	WATTS	OHMS	PRICE
LEGEND	P-A10216	10"	20 RMS	16	\$76.55
	P-A1028	10"	20 RMS	8	\$76.55
	P-A1218	12"	100 RMS	8	\$89.95
	P-A1258	12"	50 RMS	8	\$59.50
	P-A1518	15"	100 RMS	8	\$94.00
	P-AGB128	12"	50 RMS	8	\$85.25
	P-AM128	12"	80 RMS	8	\$82.50
	P-AV128	12"	80 RMS	8	\$96.25
ALPHA	P-AALPHA-6A	6"	100 RMS	8	\$45.00
	P-AALPHA-8A	8"	100 RMS	8	\$47.20
	P-AALPHA-8MRA ⁽¹⁾	8"	100 RMS	8	\$45.20
	P-AALPHA-12A	12"	100 RMS	8	\$58.65
BETA	P-ABETA-8A	8"	150 RMS	8/16	\$60.85
	P-ABETA-12A	12"	150 RMS	8/16	\$68.60
	P-ABETA-12LTA	12"	150 RMS	8/16	\$70.20
GAMMA	P-AGAMMA-15A ⁽²⁾	15"	200 RMS	8	\$90.85
DELTA	P-ADELTA-10A	10"	300 RMS	8/16	\$86.30
	P-ADELTA-12A	12"	300 RMS	8/16	\$90.20
	P-ADELTA-15A	15"	300 RMS	8/16	\$98.00
KAPPA	P-AKAPPA-15A	15"	400 RMS	4/8	\$155.50
	P-AKAPPA-15LFA	15"	400 RMS	8	\$159.95
KAPPAPRO	P-AKAPPAP-10A	10"	400 RMS	8	\$128.50
	P-AKAPPAP-15A	15"	400 RMS	8	\$155.30
	P-AKAPPAP-15LFA ⁽³⁾	15"	400 RMS	8	\$167.80
OMEGAPRO	P-AOMEGAP-12A	12"	600 RMS	8	\$223.65
	P-AOMEGAP-15A	15"	600 RMS	8	\$227.70
	P-AOMEGAP-18A	18"	600 RMS	8	\$261.00
SIGMAPRO	P-ASIGMAP-18A	18"	500 RMS	8	\$237.60
KILOMAXPRO	P-AKILOMAX-15A	15"	1000 RMS	8	\$320.45
	P-AKILOMAX-18A	18"	1000 RMS	8	\$382.35
DRIVERS	P-AMD2001	1" THROAT	40 RMS	8/16	\$94.00
	P-APSD2002	1" THROAT	40 RMS	8/16	\$109.00
CROSSOVERS	•2-way, Cabinet Ready, 1.6kHz Crossover Freq., Slope(12dB/octave LP, 18dB.octave HP, Butterworth), 8 ohms, 400w RMS, HF Level: +/-9dB				
				P-APX-II1K6	\$118.00
	•2-way, Cabinet Ready, 3.5kHz Crossover Freq., Slope(12dB/octave LP, 18dB.octave HP, Butterworth), 8 ohms, 400w RMS, HF Level: +/-9dB				
				P-APX-II3K5	\$108.00
	•2-way, Cabinet Ready, 5kHz Crossover Freq., Slope(12dB/octave LP, 18dB.octave HP, Butterworth), 8 ohms, 400w RMS, HF Level: +/-9dB				
				P-APX-II5K0	\$121.50
	•2-way, Not Cabinet Ready, 1.6kHz Crossover Freq., Slope(12dB/octave LP, 18dB.octave HP, Butterworth), 8 ohms, 400w RMS				
				P-APX-BII1K6	\$33.80
	•2-way, Not Cabinet Ready, 3.5kHz Crossover Freq., Slope(12dB/octave LP, 18dB.octave HP, Butterworth), 8 ohms, 400w RMS				
				P-APX-BII3K5	\$39.45
	•2-way, Not Cabinet Ready, 5kHz Crossover Freq., Slope(12dB/octave LP, 18dB.octave HP, Butterworth), 8 ohms, 400w RMS				
				P-APX-BII5K0	\$39.45

(1) Closed back pressed steel basket. Does not need an enclosure.

(2) Twin cone full range for compact PA systems.

(3) Rolled cloth, cone edge.

CALL FOR QUOTES!





All CAIG products
priced below
retail!

DeoxIT™ R5 Power Booster - Deoxidizing, cleaning, preserving and lubricating contact cleaner. R5 is offered with a non-flammable, fast evaporating solvent that is safe on plastics. Packaged in a new precision pump spray providing a safe alternative to pressurized aerosol can. Pump spray, 5% solution, 125 ml.

S-CR5PS-6 \$22.95



DEOXIT D5

Deoxidizes, cleans and seals electrical connections. Improves conductivity, reduces noise and distortion, arcing and RFI. Reduces wear and abrasion on electrical connectors and contacts. Use on stationary or moving contacts, with similar or dissimilar metals. 5 oz spray, 5% concentration, adjustable valve.

S-CD5S-6 \$8.50

DEOXIT D5 PEN

The pen applicator gives you more control over the regular spray. Same contents as the Deoxit above, but you can use it in tighter spaces. 7 ml of solution.



S-CD100P \$10.95

ProGold™ ProGold G*L - Formulated for extreme temperature and applications. Provides protection and service life without deterioration, gumming, or varnishing. Ideal for use in electronics where long term protection is needed. Temperature range -45°C to 400°C. Aerosol spray, 5% solution, 200 ml (5 oz.).

S-CGX5S-6 \$22.95



PROGOLD CONTACT CLEANER

The next generation of contact cleaner. Out performs all other contact cleaners. Deoxidizes, cleans surface contamination, improves conductivity and penetrates plated surfaces and bonds to base metals. Reduces noise and interference and lowers distortion. 5 oz. spray, 5% concentration, adjustable valve.

S-CG5S-6 \$12.95

PROGOLD PEN

Progold in precision pen applicator. Use on tube pins, edge connectors, etc. Precision applicator means no mess or waste. 7 ml of solution.

S-CG100P \$15.95

PreservIT™ PreservIT P5 - Seals, lubricates and preserves metal surfaces against oxidation and contamination. *USE ON:* clean/new surface or those cleaned with DeoxIT. PreservIT contains no cleaners or deoxidizers. It provides long lasting protection for newly manufactured components or those cleaned by ultrasonics, DeoxIT or other procedures. Provides a light (5%) coating. 200 ml (5 oz.), adjustable valve, no CFC's or HCFC's. S-CP5S-6 \$8.95

Caikleen™ Rubber Cleaner and Rejuvenator - Precision cleaner for rubber and platens. Ideal for computers, printers, copiers, fax machines and other office and industrial equipment. Use on all rubber rollers, parts and platens. Rejuvenates rubber and reduces misfeeds and jams!

59 ml, Squeeze Bottle

S-CRBR100L-2 \$8.25

25 ml, Needle Dispenser

S-CRBR100L-25C \$7.25



CAILUBE MOVING CONTACT LUBRICANT

This product is a precision lubricant for moving contact surfaces (faders, switches, potentiometers and other mechanisms with sliding surfaces). It replenishes lubrication lost on surfaces that have been cleaned with solvents or other cleaning solutions. 5 ounces.

S-CMCL \$8.95

Accessories

Foam Swabs - 100% lint-free open-cell urethane foam. Retains lubricant and solvent for light applications. Non-abrasive and chemical resistant. (6 pack)

S-CSWP-6 \$2.50

Cleaning Brushes - Nylon brush for cleaning contacts and connectors. Ideal for phone and phono (RCA), XLR, coax connectors and patchbays. (6 pack)

S-CAB-6 \$2.65



CircuitWriter™

CIRCUIT WRITER - BY CAIG Circuit

Writer Precision Conductive Ink Dispenser. Makes instant traces on most surfaces (epoxy, glass, metal). Draw traces on circuit boards, repair defective traces, make jumpers and shield electronics, design prototype circuits, repair rear-window heater traces. 7 ml pen dispenser.

S-CCW100P \$10.95



AERO 2000 FLUX REMOVER

Removes oil, grease and soldering fluxes. Very effective for cleaning activated fluxes and other ionic contaminants. Product may affect polystyrene, polycarbonate and acrylic parts, test for compatibility. 12 oz. can.

S-C11109

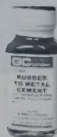
\$7.75

RUBBER-TO-METAL CEMENT

NEW LOWER PRICE

A heavy-bodied, black rubber based cement with outstanding bonding qualities to many materials such as natural & synthetic rubber, metal, wood and plastics. Dries quickly. Used to cement any rubber or flexible plastic part to cabinets, chassis or panels; also for gaskets, weather strips, etc. 2 fluid oz bottle with brush.

S-C10-352 \$4.75



SERVICE CEMENT

A quick-drying waterproof clear adhesive which forms a strong vibration resistant bond. Ideal for speaker repairs and bonding semi-porous materials to each other or to metals, plastics, etc. 2 oz. bottle.

S-C10-302 \$3.75



PEN OILER

High quality non-gumming instrument oil. Fine long-reaching metal tube extends and retracts. Use on timers, clocks, etc.

S-C10-984 \$3.75



PHONOLUBE

Light bodied grease made of polymerized oil specially developed for the lubrication of small geared mechanisms. Retains its viscosity over a wide range of temperatures. 2 oz. tube

S-C10-1223 \$3.25



LUBRIPLATE

White calcium base grease lubricant. Good for use on wiping contacts and sliding parts. Will not oxidize or harden. 1 1/4 oz. tube

S-C10-2302 \$3.50



PHONO NON-SLIP

Prevents slippage and restores proper functions on belts and drive wheels in turntables and tape recorders, especially where the rubber has hardened or become slick. 2 fl. oz.

S-C10-8602 \$2.50



RUBBER REVITALIZER

Removes "dead" rubber from old rubber surfaces to clean and revitalize idler wheels, belts and pinch rollers. 1 oz. bottle.

S-C220 \$2.50



BIG BATH

All purpose degreaser and cleaner for electrical contacts, switches, pc boards and components. Evaporates instantly and leaves no residue.

12 oz.

S-C19-902 \$6.50

22 oz.

S-C19-903 \$10.95



JIF ACTION

Cleans and provides long lasting protection for electronic controls, switches, relays, potentiometers and other components. Stops noise and squeaks. Contains silicone additive.

6 oz.

S-C19-634 \$3.50

16 oz.

S-C19-636 \$6.75

This item is great for antique radios!!



ANTI-STATIC AIRJET

Clean hard to reach places. Anti-static formulation minimizes static build-up. Blows away dust, dirt and grit without scratching. Contains no ozone depleting chemicals. Nonflammable. 12 oz. can

S-C19-8475SF \$7.95



MOHAWK CLEAR SPRAY SHELLAC

Provides a clear coating for many different surfaces. Shellac has an unusual adhesion to hard-to-grip surfaces. Hold out is exceptional on wood, plywood and plaster. Recommended for spot sealing knot holes, sap streaks and refilled areas before refinishing. Net weight 12 oz.

S-F308* **\$9.95**



MOHAWK ULTRA-FLO CLEARS

Formulated with special resins and solvents to provide a finish film free of orange peel. Little or no overspray when used over spot repairs over an existing lacquer finish. Saves time, as the finish film will not require sanding or rubbing. Net weight 13 oz.

Gloss	S-F301*	\$6.25
Satin	S-F302*	\$6.25
Flat	S-F303*	\$6.25

MOHAWK TONE FINISH TONER Also known as shading of toning lacquer. This is an opaque, pigmented lacquer finish that will build a darker and darker color with subsequent coats. Best for duplicating the shading effect on the edges of cabinets. Should be top coated with clear after the desired color is achieved. Net weight 13 oz. Van Dyke Brown.

S-F305* **\$6.25**

MOHAWK ULTRA-CLASSIC TONER

Ultra-Classic Toners utilize a non-fading, non-bleeding dye to provide excellent clarity. Wood shades can be varied without imparting the "muddy" effect sometimes associated with pigment type toners. Get dye-based transparency with the highest rating of light-fastness available for dyes. Excellent flow out, Mar & alcohol resistant, No overspray. Net weight 13 oz.

Perfect Brown - A nice warm shade that is great match for 1930's and 1940's sets.

S-F306* **\$6.25**

Walnut Brown - Use as a replacement for Burnt Umber. Great for late 1920's to early 1930's sets.

S-F309* **\$6.25**



MOHAWK LACQUER SANDING SEALER

Helps fill grain pores on open grain woods and prevent blotchy absorption of penetrating stains on birch or maple cabinets or trim pieces. Seals end grain. 13 oz. aerosol can.

S-F304* **\$6.25**

"MICRO-MESH" PLASTIC RESTORATION SYSTEM

The most efficient system available for removing scratches and haziness from plastic radio cabinets and clear dial windows. Each kit contains 5 pieces of 3 x 6" Micro-Mesh cushioned abrasive cloth ranging from coarse to ultra-fine, foam sanding block, 3 oz bottle of Micro-Gloss liquid abrasive and a soft buffing cloth. Net weight 8 oz.

S-C228 **\$19.95**



PLASTIC POLISH

Novus No. 1—Cleans and glazes plastic surface to resist finger markings, dust build-up and is anti-static.

2 oz.	S-C216	\$2.25
8 oz.	S-C226	\$4.25

Novus No. 2—Removes fine scratches, abrasions and haziness from plastic surfaces. Great for plastic radio dial windows. For best results, follow with Novus No. 1 polish.

2 oz.	S-C217	\$2.75
8 oz.	S-C227	\$5.25

Novus #3—Removes scratches from acrylic surfaces. More abrasive than Novus #2. Effective for deeper scratches. Treatment must be followed by Novus #2 to buff and polish surface.

2 oz.	S-C215	\$3.50
8 oz.	S-C225	\$6.25



"CREAMIN' DEAL"

Buy each type of the 8 oz size bottles and receive 10% off the single piece price.

S-CPOLISH-SD **\$14.15**



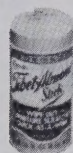
NOTE: *Federal regulations prohibit us from shipping these products by air (noted with * after part number).



PLAS-T-PAIR

A complete repair kit for plastic knobs, radio cabinets and other plastic parts. It can be poured into a crack or molded to fill gouges, holes, or make parts. After setting it can be sanded, drilled or polished.

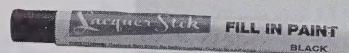
S-C244 **\$7.75**



TIBET ALMOND STICK

Wipes out scratches in wood radio cabinets quick-as-a-wink. Simply rub end of stick over scratches in any type of wood and watch them disappear like magic!

S-C243 **\$3.50**



"LACQUER STIK", WIPE ON PAINTSTICK Quick economical way to color engraved lines or stampings on metal, glass, plastics, etc. Works great for filling in markings on TRF radio dial knobs and faceplates.

White	S-F229	\$2.75	Gold	S-F230	\$3.25
Red	S-F437	\$2.75	Black	S-F438	\$2.75

WRINKLE FINISH

Great for refinishing vintage metal radio cabinets, faceplates and speakers. 12 oz. spray can.*

Jet Black	S-F227*	\$5.25
Grey	S-F701*	\$5.25
Brown	S-F226*	\$11.95



Hints for Wrinkle Finish paint: Surface must be clean and dry. Clean means no oil, grease or fingerprints. Be sure that temperature of the paint can and the surface to be painted is between 70 and 90 degrees. Spray with even strokes at a distance of 8 to 12". Apply a fairly heavy coat. Spray a 2nd coat approximately 3 minutes after the 1st, also fairly heavy. The wrinkling will appear gradually, requiring about 12 hours at room temp to completely develop. **Tip:** experience seems to indicate that a better finish develops when sprayed onto bare metal.

HAMMERTONE FINISH

Restore hammered finishes with metallic grey hammertone paint. Supplied in 12 oz. spray can.*

S-F232* **\$5.95**



Hints for Hammertone Finish paint: Surface must be clean and dry. Clean means no oil, grease, rust or fingerprints. Be sure that the temperature of the paint can and the surface to be painted is between 60 and 90 degrees. Spray with even strokes at a distance of 14 to 16". Spray lightly horizontally and then again vertically. Dries in a few minutes, depending upon temperature.

Note: On both types of paint, when the temperature of the can is appropriate, shake can at least one minute and occasionally during use.

DO-IT-YOURSELF ELECTROPLATING!

Replate nickel, silver or brass radio and phonograph parts. Uses current from any 3 to 6 volt D.C. supply or batteries. Plating brush connects to positive voltage and part being plated connects to negative. Brush sold separately. 2 oz jar.

PLATING COMPOUND

Gold	S-F221	\$39.95
Brass	S-F222	\$3.95
Copper	S-F296	\$3.95
Nickel	S-F223	\$9.25
Silver	S-F224	\$15.50
PLATING BRUSH	S-F225	\$3.50

(instructions come with plating brush)

RCA PHONO JACKS Available in either nickel or gold plated finish. Nickel plated comes in package of two; gold plated sold individually. Gold connections provide optimum performance.

Nickel (2)	S-H30-528	\$1.75
Gold	S-H30-528-3	\$3.95
Higher quality Gold	Blk S-H267B (Front mount)	\$4.25
	Red S-H267R (Front mount)	\$4.25
	Wht S-H267W (Front mount)	\$4.25
	Blk S-H268B (Rear mount)	\$4.25
	Red S-H268R (Rear mount)	\$4.25
	Wht S-H268W (Rear mount)	\$4.25



BANANA PLUG Internal stud for solder or solderless connection. Body is hex brass, tip is four leaved, phosphor bronze, nickel or gold plated spring.

Red (Nickel)	S-H33-032	\$1.50
Black (Nickel)	S-H33-033	\$1.50
Red (Gold screw type)	S-H264R	\$2.50
Black (Gold screw type)	S-H264B	\$2.50



DUAL BANANA PLUG Mates with standard dual binding posts with 1/4" centers and can be staked for multiple connections. Polarity is indicated by rib. Nickel or Gold plated, screw connection

Red (Nickel)	S-H33-010	\$2.50
Black (Nickel)	S-H33-011	\$2.50
Red (Gold)	S-H265R	\$3.50
Black (Gold)	S-H265B	\$3.50
Black & Red (Heavy Duty Gold)	S-H269	\$4.95



DUAL BINDING POST Red and black posts, accepts either single or dual banana plugs. Mounts in two 1/2" holes on 3/4" centers, panel thickness up to 1/4". 15A rating

Gold	S-H263	\$3.95
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INDIVIDUAL BINDING POSTS Accepts standard banana plug, test and phone tip plugs, spade lugs, alligator clips and bare wire.

Red	S-H2131R	\$0.75
Black	S-H2131B	\$0.75



INSULATED BINDING POSTS Accepts standard banana plug, test and phone tip plugs, spade lugs, alligator clips and bare wire. One red and one black per package. Available in Nickel and Gold plated.

NICKEL - 2pk Red/Black.	S-HF2-930	\$4.50/2pk	Clearance!
GOLD PLATED - Red	S-H266R	\$2.75	
Black	S-H266B	\$2.75	



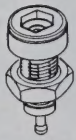
OLD STYLE BINDING POST S-H162 \$2.25 (While supplies last)

EARLY STYLE BINDING POST An exact reproduction of an early Philmore binding post. Precision machined from brass, nickel plated, 1/4" x 1/8" high, with screw. S-H159 \$2.25




INSULATED DELUXE TIP JACK For standard .080" tip plug. Machined contact with turret terminal. Brass body, silver finish. 10A rating For panels up to .437" thick.

Red	S-H260	\$1.25
Black	S-H261	\$1.25



SLIDE SWITCHES Standard size slide switches, cadmium plated solder connections. 125V AC-DC, Pkg. of 2.

SPST	P-H36	\$0.50
SPDT	P-H37	\$0.50

On-Off Standard Slide Switch Rating: 11A 125V AC, 5A 125V DC, DPDT P-H35-242 \$1.50



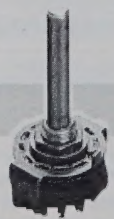
ROTARY SWITCHES 0.3A - 125V current rating, contact and terminal material are silver plated phosphor bronze. 5 position, 2 pole, non-shorting. 1/4" round shaft, solder connections. S-H35-377 \$5.25

Also available.....

Chassis mount rotary switches, 1/8" shaft

3 pole, 4 position	P-H034	\$1.80
4 pole, 3 position	P-H043	\$1.80

And... Double on-off rotary (DPST) P-H0201 \$1.25



TOGGLE SWITCHES Choose from two styles of toggle switches. Ball handle (pictured) is SPST, 6A-125V rated. Other is heavy duty, standard "bat" handle, DPDT (on-none-on), 20A-125V rating. Both mount in 1/2" hole. Screw connections.

Ball Handle SPST	P-H35-170	\$3.25
Bat Handle DPDT	P-H35-146	\$5.50
Bat Handle SPST 3A, 250V	P-H35	\$3.00 While supplies last.



I.F. TRANSFORMERS NOS I.F. transformers in 1/4" square can. P-C214 has two #6-32 mounting studs. P-C215 & P-C219 use mounting clamp below. P-C90PH is input &/or output. **While supply lasts.**

10.7 mHz	P-C214	\$4.50
19 kHz	P-C215	\$4.50
10.7 mHz universal pc mount	P-C218	\$2.50
455 kHz pc mount	P-C219	\$4.50



1/4" IF TRANSFORMER MOUNTING CLIP

P-C213	\$1.00
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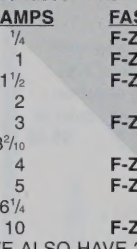
WHILE SUPPLIES LAST



1/4" X 1 1/4" FUSES Protect your expensive investment or hobby with inexpensive fuses. Fits fuse block and fuse holder below. Package of 5 fuses.

AMPS	FAST ACTING	SLO-BLO
1/4	F-ZF005 \$3.00	
1	F-ZF010 \$2.50	F-ZS010 \$4.25
1 1/2	F-ZF015 \$2.50	
2		F-ZS020 \$4.25
3	F-ZF025 \$2.50	
3 2/10		F-ZS030 \$4.25
4	F-ZF035 \$2.50	F-ZS035 \$4.25
5	F-ZF040 \$2.50	F-ZS040 \$4.25
6 1/4		F-ZS045 \$4.25
10	F-ZF050 \$3.50	

WE ALSO HAVE 3AG, 1/4 AMP FUSES IN PACKS OF 5 F-3AGD25 \$0.50



FUSE BLOCK S-H259 \$1.25

FUSE HOLDER S-H258 (1/4" hole) \$1.75

LOWER PRICE




IN-LINE FUSE HOLDER S-H254 \$1.00

PANEL MOUNT FUSE HOLDER- For 3AG While supplies last S-H255 (1/4" hole) \$1.50




RUBBER GROMMETS Protect electrical wires and cables from sharp edges in holes drilled through chassis boxes. Groove is 1/16" wide on all grommets listed. Pkg of 10.

CHASSIS HOLE DIA.	GROMMET HOLE DIA.	PART NO.	PRICE
1/4"	1/8"	P-G014	\$0.50
3/8"	1/4"	P-G038	\$0.65
1/2"	3/8"	P-G516	\$0.65
5/16" X 1/8"	1/8"	P-G516A	\$0.65
7/16"	1/4"	P-G716	\$0.70
7/16"	3/8"	P-G717	\$0.75
1/2"	3/8"	P-G005	\$0.75



RUBBER BUMPERS AND FEET Screw on type. Screws not included. Sold in package of 4.

1/2" dia. x 1/4" high	P-H1308	\$1.30
3/16" dia. x 3/8" high	P-H253	\$2.00

Self-adhesive backing. Package of 20.

1/8" H x 1/2" O.D.	P-H16-150	\$3.00
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Button Bumpers. Package of 4.

7/16" dia. x 3/16" high	P-H1309	\$0.50
9/16" dia. x 7/16" high	P-H1310	\$0.50

Recessed Bumpers. Package of 4.

5/8" dia. x 1/2" high	P-H2082	\$2.00
3/4" dia. x 1/2" high	P-H2082S	\$2.50
1" dia. x 1" high	P-H2097	\$6.00
1" dia. x 1" high	P-H2097S	\$6.50

"S" after part number means steel washer insert



POINT TO POINT TERMINAL BOARDS

These boards will aid the hobbyist or OEM in project building. They are built on copper clad epoxy board, the copper is used as the ground plane. Simply connect the component to the tube sockets then to a turret or to the ground plane. Wire your project on the board, off chassis, then install the board to chassis for a neat looking finish.

Features:

- Rigid high temperature (285°F continuous) epoxy board FR4 0.125" thick with 2/0 copper cladding
- 0.500" standoffs.
- Solid brass electro solder plated terminals.
- Gold plated ceramic tube sockets.
- Mounting hardware and template included.

TERMINAL STRIPS

Standard size terminal strips, 1/16" thick bakelite, tin plated steel solder lugs and brackets on 3/8" centers. Sold in bags of 5 each except as noted.

SOLDER LUG STYLE



EX: P-0802H
8 Lug, 2 Ground

P-0201H	\$1.25	2 lug	1 ground
P-0300H	\$1.50	3 lug	0 ground
P-0301H	\$1.50	3 lug	1 ground
P-0401H	\$1.75	4 lug	1 ground
P-0500H	\$1.95	5 lug	0 ground
P-0501H	\$1.95	5 lug	1 ground
P-0600H	\$2.30 Limited quantity	6 lug	0 ground
P-0601H	\$2.50	6 lug	1 ground
P-0602H	\$2.50	6 lug	2 ground
P-0701H	\$2.75	7 lug	1 ground
P-0702H	\$3.00 Limited quantity	7 lug	2 ground
P-0802H	\$3.25	8 lug	2 ground
P-0901H	\$4.25	9 lug	1 ground

WIRE WRAP STYLE



EX: P-1002H
10 Lug, 2 Ground

P-0400H	\$1.40	4 lug	0 ground
P-0700H	\$2.25	7 lug	0 ground
P-1002H	\$0.60 Each	10 lug	2 ground
P-1102H*	\$2.50	11 lug	2 ground
P-2200H	\$2.00 Each	22 lug	0 ground
P-3002H	\$2.25 Each	30 lug	2 ground

* 8 wire wrap; 3 solder lugs

EPOXY BOARD STYLE



EX: P-1200 H
12 Lug, 0 Ground

P-1200H	\$3.95 Each	12 lug	0 ground
P-0600H-1	\$2.25 Each	6 lug	0 ground



UNIVERSAL REPLACEMENT COILS Will replace broadcast band coils in any tube type radio. Adjustable inductance for perfect tracking. Mount on bus wire leads or in 1/16" hole. Coils are similar to Miller numbers that correspond.

DESCRIPTION	PART NO.	PRICE
Antenna Coil	P-C70-A	\$5.25
Oscillator Coil	P-C70-OSC	\$5.25
RF Coil	P-C70-RF	\$5.25

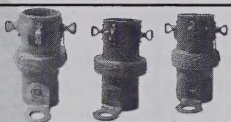
SHORTED UNIT

PHONO JACK 8 RCA jack panel mount strip with common copper grounding strip. S-H315 \$0.50



Oscillator Coils

3 Lug, 225 UHY	P-C76	\$2.50
3 Lug, 142 UHY	P-C77	\$2.50
4 Lug, 125 UHY	P-C78	\$2.50



ANTENNA COILS

650 uH, 4 1/4" x 1 1/32" ferrite P-C75 \$4.95



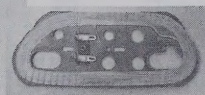
250 uH; 3.5" x 3/32" ferrite
P-C73 \$4.95



270 uH P-C74 \$4.50

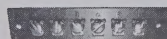


230 uH 4 1/4" x 1 1/32" ferrite
P-C72 \$4.95



FERRITE RODS Rods are made of 61 Ferrite material, and have a broadcast band of 640KC to 1650KC. .375" ± 0.020" dia. x 5.00" ± 0.100" long P-FR1 \$8.25
.375" ± 0.020" dia. x 7.50" ± 0.150" long P-FR2 \$9.50

If you don't see the size you need, we have a limited stock of NOS rods, just ask!!



6 SCREW TERMINALBOARD
S-H317 \$0.50

TERMINAL BOARD 2 screw terminal strip for TV, radio antenna connections, pkg. of 3. S-H313 \$0.75



4 SCREW TERMINAL BOARD 2 1/4" X 1 1/8"

S-H318 \$0.50



1 SCREW TERMINAL BOARD S-H319 \$0.30



1/4" PANEL MOUNT PHONE JACKS

Nickel silver spring, nickel plated brass mounting bushing.

Mounts in 1/8" hole.	
3 conductor, stereo	S-H33-099 \$1.50
Mounts in 1/4" hole.	
2 conductor, shorting	S-H33-097 \$1.50

IN-LINE QUAD PHONO JACK S-H314 \$0.60

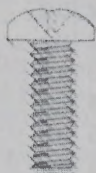


SQUARE QUAD PHONO JACK
S-H311 \$0.50

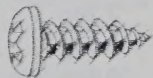


Pan Head Phillips Machine Screws, Zinc Package of 5

Part No.	Size	Price
S-HS440-14	4-40 x 1/4"	\$0.30
S-HS440-38	4-40 x 3/8"	\$0.30
S-HS440-12	4-40 x 1/2"	\$0.35
S-HS632-14	6-32 x 1/4"	\$0.35
S-HS632-38	6-32 x 3/8"	\$0.40
S-HS632-12	6-32 x 1/2"	\$0.40
S-HS832-38	8-32 x 3/8"	\$0.40
S-HS832-12	8-32 x 1/2"	\$0.45
S-HS832-34	8-32 x 3/4"	\$0.50
S-HS1032-12	10-32 x 1/2"	\$0.60
S-HS1032-34	10-32 x 3/4"	\$0.75
S-HS1032-1	10-32 x 1"	\$0.90

**Pan Head Self Tapping Screws, Zinc Package of 5**

Part No.	Size	Price
S-HST6-38	#6 x 3/8"	\$0.40
S-HST8-38	#8 x 3/8"	\$0.50
S-HST8-12	#8 x 1/2"	\$0.50

**SHEET METAL SCREW PACKS** Cadmium plated screws, hex head, ideally suited to all electronic devices. At least 15 pc/pkg.

S-H351	8-32 x 1/2"	\$0.50
S-H353	8-32 x 3/4"	\$0.50
S-H352	8-32 x 1"	\$0.50

**#10 MACHINE SCREWS**

Ideal for transformer mounting, Pkg. of 4
P-H245 \$1.00

**Flat Washers, Zinc, Type A Narrow Package of 5**

Part No.	Size	Price
S-HW4	#4	\$0.40
S-HW6	#6	\$0.25
S-HW8	#8	\$0.25
S-HW10	#10	\$0.25

**Internal Tooth Lock Washers, Zinc Package of 5**

Part No.	Size	Price
S-HLW4	#4	\$0.40
S-HLW6	#6	\$0.40
S-HLW8	#8	\$0.40
S-HLW10	#10	\$0.45

**Finished Hex Nuts, Zinc Package of 5**

Part No.	Size	Price
S-HHN440	4-40	\$0.25
S-HHN632	6-32	\$0.25
S-HHN832	8-32	\$0.28
S-HHN1032	10-32	\$0.30

**QUICK CONNECT TERMINALS**
While Supplies Last!

Push on female solder terminal. Pkg of 12 S-H370 \$0.45 	Solder ring terminals. Pkg of 12 S-H371 \$0.45	Push on male and female. Pkg of 12 S-H372 \$0.60
#8 open end spade. Pkg of 20 S-H373 \$0.60 	Rivet or boltmount. Mates with S-H370 Pkg of 24 S-H374 \$0.75	Spring loaded. Pkg of 25 S-H375 \$0.85

T-Nut, Zinc Package of 5

Part No.	Size	Price
S-HTN632	6-32	\$0.30
S-HTN832	8-32	\$0.32
S-HTN1032	10-32	\$0.35

**Nylon Nuts****Pkg of 12**

\$0.60 each

Part No.	Size
S-HNN440	4-40
S-HNN632	6-32
S-HNN832	8-32
S-HNN1032	10-32

Size

Nylon Washers - Package of 12

\$0.50 each

Part No.	Size
S-HNW4	#4
S-HNW6	#6
S-HNW8	#8
S-HNW10	#10

Nylon Screws Pkg of 12

\$0.80 each

Part No.	Size
S-HNS0401	4-40 x 1"
S-HNS0412	4-40 x 1/2"
S-HNS0414	4-40 x 3/4"
S-HNS0434	4-40 x 3/4"

Size

S-HNS0601	6-32 x 1"
S-HNS0612	6-32 x 1/2"
S-HNS0614	6-32 x 3/4"
S-HNS0634	6-32 x 3/4"

S-HNS0801	8-32 x 1"
S-HNS0812	8-32 x 1/2"
S-HNS0814	8-32 x 3/4"
S-HNS0838	8-32 x 3/8"

S-HNS1001	10-32 x 1"
S-HNS1012	10-32 x 1/2"
S-HNS1014	10-32 x 3/4"
S-HNS1038	10-32 x 3/8"

Size

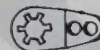
ANTENNA CLIP

1/2" diameter

S-H303 \$0.25

**SOLDER/GROUND LUGS S-H112 Pkg/10**

\$0.60

**CIRCUIT BOARD MOUNTING BRACKET**

1/8", Pkg. of 4

P-H197 \$0.50

Limited to stock on hand

**ALLIGATOR CLIPS**

Will accept bare wire or standard banana plugs.

S-H301-103 insulated barrel, box/10 \$3.00

S-H302 plain, pkg. of 4 (not pictured) \$0.50

**DECORATIVE HEAD SCREWS** Decorative head screws, like used for speaker mounting on 1930's vintage radio cabinets. #8-32, 1 1/2" long. Sold in packages of 4.

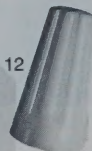
Nickel Plated	P-H240	\$2.00
Brass Plated	P-H241	\$2.00
Bronze Plated	P-H242	\$2.00
Unplated	P-H243	\$2.00
Nickel Plated	P-H244	\$2.00



P-H240



P-H241
P-H242
P-H243
P-H244

SMALL WIRE NUTSGreat for hobbyists, pkg of 12
S-H408 \$0.35**TENSION SPRINGS**

Use for dial drive or turntable.

S-H400 pkg. of 10 \$1.00



HEDLOCK FASTENERS These super sturdy fasteners are great for speaker covers or helping prevent earthquake damage. 4 sets of 2 clips(package of 8).

S-SJ3201 \$1.20



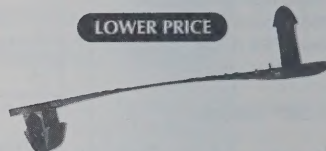
FAHNESTOCK CLIP Spring brass clip 1/4" long for up to 14 ga. wire. No. 6. mounting hole.
Pkg. of 100 S-H11-4034 \$11.25
Pkg. of 6 S-H11-4043-6 \$1.00



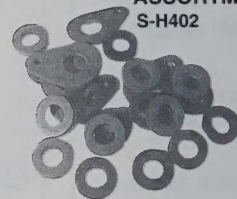
**Antique's
Hardware
Store**

SNAP-LOCK WIRE**TIE CLIPS**

S-H377 Pkg of 20 \$0.25

LOWER PRICE**FIBER WASHER ASSORTMENT**

S-H402 \$0.75



CABLE TIES 3 1/2" long, pkg. of 10
S-H376 \$0.50



INTERLOCK, FLUSH TYPE

P-SP2K-004

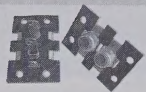
\$0.50



DOUBLE PHONO JACK

S-H310 Pkg. of 2

\$1.00



COLOR BURST CRYSTAL

RCA type 3, 3579.545 kc. Excellent for ladder filters.
S-MCBX \$0.25



LOWER PRICE

AC LINE INTERLOCK

1 1/2" mounting centers. non polarized P-SP2-K-002 \$1.00
polarized P-SP2-K-003 \$1.00



RCA DUAL PATCH CORDS

6' dual cables for line in/out for VCRs, tuners, pre-amps, etc.
Red & black plugs. S-H270 \$1.00



LOWER PRICE

BRAIDED COPPER TUBING

Ideally suited for shielding, bonding and grounding of all types
of electronic equipment. Available in 2 lengths.

S-W409 3' length \$1.25
S-W410 6' length \$2.50



HOBBY TOY & TAPE RECORDER MOTORS

1.5 V - 8000 RPM S-H405 \$0.50
6.0 V - 5000 RPM S-H406 \$0.50



INSULATING CAMBRIC

Yellow varnished cambric .010" thick, used in transformers, field coils, chokes,
etc. Dielectric strength 5,000 volts. 9" wide roll contains 210 sq. inches.
S-M549 \$4.50

FISH PAPER

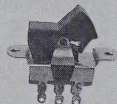
Gray insulating paper .010" thick, used in switches, under terminals, in transform-
ers, etc., where mechanical strength is required. Dielectric strength 3000 volts. 9"
wide roll contains 250 sq. inches. S-M560 \$3.75

PLASTIC BAGS PROTECT VALUABLE LITERATURE!

9" X 12" .0015 gauge clear flat plastic bags are ideal for protecting and displaying
early magazines, pamphlets, booklets, literature, etc. Package of 100 bags.
S-B703 \$5.25

ROCKER SWITCH 3A, 125VAC, DPDT. Pkg of 2

P-H38 \$0.80



"NOBLE" POWER SWITCH

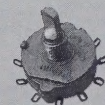
P-H483 \$1.50

LOWER PRICE



SELECTOR SWITCH Used in Dynaco 400

P-H400 \$1.00



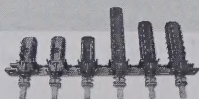
"SHADOW" POWER SWITCH Black - off, Green - on

P-H482 \$0.50



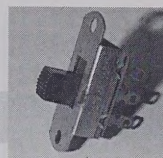
SWITCH BANK 6 POSITION

Used in Dynaco PAT5 P-H06 \$1.75



SWITCH BANK 3 POSITION

P-H03 \$1.00



Switch, Slide, DPDT, 3A 125 VAC, 2pk
P-H40 \$0.50

Switch
Rotary, multi-position
P-H480 \$4.00



Fans To Keep Your Gear Cool!!



Fan, 12VDC, 4.5" DIA S-FAN02 \$7.50



Sanyo brushless DC fan. 2 1/2" dia x 1" thick, 12vdc, 70ma.
S-FAN01 \$5.00



ETRI high quality fan. 3.6" dia x 1" thick, 115vac, 65ma. 1700
rpm, 21 cfm. With wire form fan guard and detachable power
cord S-99XM \$12.95



VIBRAPOD Isolators

THE AFFORDABLE VIBRATION ISOLATORS

Enhance your listening sessions! These affordable
vibration isolators improve bass definition and depth,
dynamics, imaging, detail resolution, ambiance, clarity
and sound stage. 4 different models support from 2 to
28 pounds each. All are 2 1/2" dia. x 1/8" high. Tempera-
ture range from 50°F to 100°F. EACH \$6.00

Model 1 has a weight range of 2 to 3 pounds each, recommended
weight is 2 1/2 pounds. Suggested uses: CD, DVD, Laserdisc
Players & Transports, DSS receivers, DAC's, Preamps, Amplifiers
and Speakers. S-VIBRA1

Model 2 has a weight range of 4 to 8 pounds each, recommended
weight is 6 pounds. Suggested uses: CD, DVD, Laserdisc Players
& Transports, DAC's, Preamps, Amplifiers and Speakers. S-VIBRA2

Model 3 has a weight range of 8 to 12 pounds each, recommend-
ed weight is 10 pounds. Suggested uses: Medium size Amps or
Speakers. S-VIBRA3

Model 4 has a weight range of 14 to 18 pounds each, recommend-
ed weight is 16 pounds. Suggested uses: Heavy Amps, DAC's, ,
Transports, Turntables, Speakers. S-VIBRA4

Model 5 has a weight range of 22 to 28 pounds each, recommend-
ed weight is 25 pounds. Suggested uses: Extremely Heavy Amps,
Turntables or Speakers. S-VIBRA5

VIBRAPOD Isolators may leave rings on woods, acrylics, and painted
surfaces. They may also dissolve the paint, especially if it is lacquer. To
protect these surfaces and your equipment please use wax paper or
plastic wrap between the VIBRAPOD Isolators and these surfaces.



RUBBER CHASSIS MOUNT WASHERS

Gum rubber chassis mounting washers as used on thirties vintage Zenith and Philco radios. Allows proper dial centering in cabinet opening. P-H182 and P-H187 have adhesive backing for laminating to other washers to increase thickness. 1/4" inner diameter.

1 1/4" dia. x 1/8" thick	P-H182	\$0.90
1 1/4" dia. x 1/4" thick	P-H183	\$0.90
7/8" dia. x 1/8" thick	P-H185	\$0.75
7/8" dia. x 1/4" thick	P-H186	\$0.75
1 1/4" dia. x 3/8" thick	P-H187	\$1.25

LEATHER REPLACEMENT HANDLES

FOR EARLY RADIOS Genuine leather handles fit many Zenith, Philco and Emerson portable radios, as well as other brands. Includes metal brackets and rivets.

BRACKET

SPACING	COLOR		PRICE
4.5" to 5.5"	Brown	P-H254	\$12.95
4.5" to 5.5"	Black	P-H255	\$12.95
5" to 6"	Brown	P-H256	\$12.95
5" to 6"	Black	P-H257	\$12.95
5.5" to 6.5"	Black	P-H258	\$17.95

Direct replacement for early RCA portables! Steel reinforced handle, 6 1/4" spacing, brown. P-H259 \$18.95

OLD STYLE SPAGHETTI Black fiberglass sleeving is varnished and closely resembles early style spaghetti. Available in 2 sizes. Minimum 10 feet per size.

20 AWG	S-M436 per ft.	\$0.40
11 AWG	S-M401 per ft.	\$0.50

SPAGHETTI ASSORTMENT 9" lengths of insulating sleeving in assorted colors and sizes from No. 24 through 3/8". Includes old style varnished as well as plastic and fiberglass types. Pkg. of 25 S-M550 \$2.25

HEAT SHRINKABLE PVC TUBING

Shrinks to half it's original size when heated by heat gun, soldering iron or just a match. Use for insulating terminals, connectors and wire splices. Comes in 6" lengths and quantity shown.

ORIG. DIA.	QTY./BAG		
.125"	30	S-M12-1044	
.187"	27	S-M12-1046	
.250"	23	S-M12-1048	
Assorted	23	S-M12-1080	\$3.95

HEAT SHRINK TUBING ASSORTMENT

Assortment of 2" heat shrink in many colors and sizes. Shrinks to 50% of it's original size. S-M14 \$1.25

3.5 MM PLUG

Screw off barrel to access solder lugs. Package of 5. S-H262 \$1.25

PHONE PLUG Standard 1/4" two conductor phone plug. With screw connections for headphone pins, etc. Black plastic handle. S-H33-622 \$1.00

PHONE PLUG 1/4" two conductor phone plug, with solder connections.

black plastic	S-H256	\$1.25
chrome	S-H257	\$1.50

PHONE TIP

Standard .080" pin with .136" solder cup. Hollow tip, nickel-plated. Pkg. of 10 S-H33-156 \$5.50

Tube Sets

We offer complete tube sets for several radio and amp types at substantial savings!

"ALL AMERICAN FIVE" TUBE SET

Re-tube your 1940s era radio at a discount price! The immortal "All American Five" tube set consists of one each 12SA7, 12SK7, 12SQ7, 50L6GT and 35Z5GT. A savings of over 18% if purchased separately.

Reg. Price \$26.80

T-AA5 \$21.95

OLDER CLOCK RADIOS

1 12AV6	Regular Price	\$18.90
1 12BA6	Special Price	\$16.85
1 12BE6	T-CLOCKRADIO	
1 35W4		
1 50C5		

FENDER TWIN REVERB

4 12AX7	
(Yugo made, Philips branded)	
2 12AT7 WC	
(US) Philips ECG JAN	
4 6L6GC (Matched Svetlana)	
Regular Price	\$126.80
Special Price	\$101.95
T-FTWIN	

FENDER SUPER REVERB

4 12AX7	
(Yugo made, Philips branded)	
2 12AT7 WC	
(US) Philips ECG JAN	
2 6L6GC (Matched Svetlana)	
Regular Price	\$92.90
Special Price	\$74.80
T-FSUPER	

1950's Trans-Oceanic Tube Sets

1 1L6	1 1L6
2 1U4	2 1U4
1 1S5	1 1U5
1 3V4	1 3V4
Regular Price	\$49.90
Set Price	\$44.20
Part # T-TRANSO-1	
	Regular Price \$50.95
	Set Price \$45.25
	Part # T-TRANSO-2

If you need to replace your 50A1, we have a solid-state replacement that will work for you.

T-50A1TR \$15.75

GREENLEE CHASSIS PUNCHES

Round hole punches for use in mild steel up to 16 gauge. Make professional chassis punches on your projects. **Absolutely no returns unless punch is defective!**

HOLE DIA.	PART NO.	PRICE
1/8"	S-T703012	\$28.95
5/16"	S-T703058	\$31.95
3/8"	S-T7031116	\$34.95
1/2"	S-T703034	\$34.95
1"	S-T703100	\$39.95
1 1/8"	S-T703118	\$39.95



DELUXE NIBBLING TOOL

Cuts metal and non-brittle plastic. Will cut any size and shape of hole from the edge or from a 3/16" inside hole. Cuts steel up to 18 gauge as well as copper, brass, aluminum and plastics up to 1/16". Spring operated. **S-T806 \$8.95**



TUBE PIN STRAIGHTENER

7 and 9 pin straightener, mounts on work bench. Limited quantity. **S-T8655 \$5.95**



CONTACT BURNISHING TOOL

Stainless steel strip, microscored to an ultra-fine file surface. Remove oxide and corrosion on contacts made of platinum, palladium, molybdenum, gold, tungsten and silver. **S-T9338 \$1.50**

SOLDERING IRON

30 watt AC/DC just the right size for electronic work. 3/32" dia. replaceable tip. UL approved. 6 oz. **S-T120 \$6.95**



REPLACEMENT TIPS 3/32" dia. **S-T121 \$1.25**

SOLDER AID TOOL

Stainless steel, solder will not stick. 6 1/2" long with plastic handle. Forked tip on one end, straight reamer on the other. **S-T9075 \$3.50**



SOLDER

60/40 rosin core type in convenient, clear plastic, self-feed dispenser.

Standard .050" dia., 6 1/2 ft. length **S-TH3-390 \$2.75**

Fine Line .032" dia., 12 ft. length **S-TH3-391 \$3.25**

60/40 rosin core, .050" dia. in 1 lb spool. **S-T9000 \$8.95** **REDUCED**



DESOLDERING BRAID

Made of finely-woven copper braid impregnated with pure rosin flux, for high efficiency and maximum solder holding capacity. 5 foot dispenser spool.

.08" wide **S-T22-405 \$2.25** .15" wide **S-T503 \$4.50**

LONG REACH PLIERS - Great for getting into hard to reach places.

11" Long Reach, Long Nose Pliers

S-T56922

\$10.95

11" Long Reach, 45° Bent Nose Pliers

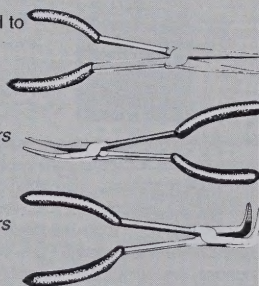
S-T56926

\$10.95

11" Long Reach, 90° Bent Nose Pliers

S-T56928

\$10.95

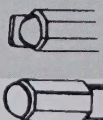


DOUBLE END HEX TOOL

Molded from Delrin, 5 1/2" long. Ends are .125 hex with .10" wide by .02" thick plastic screw driver on one end. **S-T9091 \$1.75**

Same as above, with .100" hex.

S-T702 \$1.95



DUPLEX ALIGNER

Butyrate shaft 6 1/4" long with 1/8" wide steel tips. Tip on one end recessed. **S-T8276 \$2.25**



3-IN-1 HEX CORE TOOL

Molded from Celcon, 5 1/8" long. Stepped hex .078" to .100". Undercut end .100" hex to reach bottom slug in coils. **S-T9302 \$2.25**



TUBE AND PARTS EXTRACTOR

Straight jaws for firm grip, spring steel construction, nickel plated, insulated jaws. **S-T5092 \$5.95**



HEAT SINK

Absorb heat during soldering/desoldering sensitive parts. 2 1/4" long, high carbon steel, hardened & with PVC coating in handle. **S-T156 \$2.00**

MULTI PURPOSE TOOL - 11 functions

- Clamp
 - Wire stripper, AWG 22-10
 - 0 - 3 mm wire loop
 - Soft wire cutter (Cu, Al)
 - Bolt cutter, 4-40 to 10-32
 - Steel wire cutter, 0 - 3 mm
 - Insulated terminal crimp, 10 - 22 AWG
 - Non-insulated terminal crimp, 10 - 22 AWG
 - Solid wire cutter
 - Ignition terminal crimp
 - Flag terminal crimp
- S-T203 \$7.95**



REDUCED

ALIGNMENT TOOLS

Professional tool made of Tenite, 5 1/8" long shaft, 3/16" dia. with tapered ends. **S-T8609 \$2.25**



Hex tool. 5 1/4" long, .1" hex end, .075" flat end. **S-T9303 \$1.00**

ALIGNMENT TOOL KIT

Contains 5 different tools for all standard adjustments. Includes "Extend-it" for long reaches. Tools are Delrin packaged in pocket-saver pouch. Tools are: 8282 Zenith type, 8606 Hex wrench, 9091 Hex core tool, 9304 double end tool. **S-T8454 \$6.95**



NYLON ALIGNMENT TOOL KIT

Assorted hex and flat tools for alignment work. **S-T9304 \$1.50**



ALIGNMENT TOOL KIT

Contains 5009 Duplex no-metal screwdriver, 5097 K-tran tool, 8271 core aligner, 8282 Zenith alignment tool, 9091 hex iron core tool, 9440 transistor tool, 8276 Duplex aligner and 9304 double end tool. **S-T18-530 \$9.95**



HEX TOOL

.075" Hex on each end of tool **S-T704 \$1.00**



JUMPER WIRE SET

Heavy duty test leads 22" long with insulated alligator clips. Contains one each of black, red, white, green and yellow jumpers. Set of 5 **S-ZJ4-655 \$5.95**



RESISTANCE WHEEL

Rotate dial to select resistor for best circuit operation. Uses 1/4 watt 5% resistors covering 5 ohms to 1 megohm. With insulated alligator clips. **S-Z-20-104 \$19.95**



PANEL METERS

80mm wide x 64 mm high ($\sim 3\frac{1}{8}" \times 2\frac{1}{2}"$) white face. Fits in $2\frac{3}{8}"$ round panel cut out. $2\frac{1}{2}\%$ accuracy.

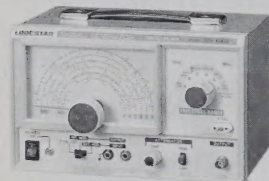


PART	NO. RANGE	PRICE
S-PMD100UA	0-100 uA DC	\$8.50
S-PMD1MA	0-1 mA DC	\$8.50
S-PMD100MA	0-100 mA DC	\$8.50
S-PMD1A	0-1 A DC	\$8.50
S-PMD10V	0-10 V DC	\$8.50
S-PMD100V	0-100 V DC	\$8.50
S-PMA150V	0-150 V AC	\$8.50

RF SIGNAL GENERATOR Compact solid state RF signal generator designed for the hobbyist, service bench and technical instruction. The generator is most suited for checking and aligning the IF circuit and tuners in AM, FM, and TVs. 100KHz to 150MHz in 6 bands and up to 450MHz on third harmonics. 5.9" high x 9.8" wide x 5.1" deep. 7.1 lbs.

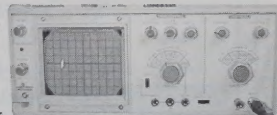
Features:

- Wide frequency range - 100KHz to 150MHz
- With 1 KHz oscillator purpose of modulation
- High stability
- Output control - 0dB/-20dB/-40dB and fine adjuster
- Frequency accuracy $\pm 5\%$
- RF output - 100mV rms appx (up to 35MHz unloaded)
- Output control - High-low switch, fine adjust
- Audio output 1KHz min., 2V rms
- Modulation - Internal - 1KHz (AM) 30% appx.
- External - 50Hz ~ 20KHz at < 1V rms input



S-MRFGN \$149.95

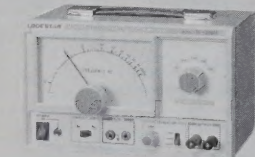
OSCILLOSCOPE DESCRIPTION: The Model OS-701 OB is a compact general purpose oscilloscope with wideband, DC to 10 MHz, and high vertical input sensitivity 10mV/cm characteristics. The time base sweep rate is designed between 1 μ s/cm to 1 ms/cm. Built in fine controller for easier operation. Engineered for maximum usefulness in laboratories, production lines, as well as in monitoring of instruments. **FEATURES:** Band Width DC ~ 10 MHz (-3dB); Automatic TRIG control; Vertical Maximum Sensitivity 10 mV/cm. 6" high x 14" wide x 15" deep, 22 lbs. **S-MOS-701OB \$339.00**



AUDIO GENERATOR The oscillation frequency range of this audio generator is between voice frequency band and super voice frequency band. Its main function is to measure the characteristics of an audio circuit. Square and sine wave. 10K ohm input impedance, 10V rms maximum output voltage. 600 ohm output impedance. Equipped with synchronized input terminals, enabling the high power output signals to be accurately controlled by small signals. Comes with test lead and ground lead. 5.9" high x 9.8" wide x 5.1" deep. 6.9 lbs. **S-MAFGN \$149.95**

Features:

- High frequency stability: within $\pm 2\text{Hz}$
- Frequency range - 10Hz ~ 1MHz, 5 decade bands
- Accuracy - 10Hz ~ 1MHz $\pm 5\% + 2\text{Hz}$
- Output control - 0dB/-20dB/-40dB and fine adjuster 100Hz ~ 100KHz $\pm 3\% + 3\text{Hz}$
- Output Voltage Floating: within $\pm 1.5\text{dB}$

**Sine Wave Output Square Wave Output**

- Range - 10Hz ~ 1MHz
- Output voltage - 8V rms max.
- Output distortion - < 0.05% - 500Hz ~ 50KHz
- Range 10Hz ~ 100KHz
- Output voltage - 15V p-p
- < 0.5% - 50Hz ~ 500KHz

MAXI-MATCH DIGITAL TUBE TESTER

SPECIFICATIONS AND CHARACTERISTICS: The Maxi-Matcher digital tube tester measures any of the standard octal base power pentodes for Plate Current (Ip) and Transconductance (Gm) characteristics, and with optional adapters will also test nine-pin pentodes, Novar power pentodes, 7591s, and some power triodes and power tetrodes. The test set measures up to four tubes at a time and has a separate test socket

with LEDs for short circuit testing. Separate selector switches for Bias voltage, Plate voltage, Measurement Type, and Test Socket select are provided, along with a mains switch. All measurement data appear on a large 3.5 digit LED display. Maxi-Matcher's "smart" power supply reset circuit automatically protects the unit from shorted tubes.

Designed to be used by the audio technician, music store salesperson, musician or vacuum tube hobbyist to quickly create matched power tube sets and test tubes for functionality, the Maxi-Matcher is a modern, highly accurate, user friendly digital tube testers that tests Dynamic Mutual Conductance (transconductance) and Short Circuit. The tester is intended as a multi-pur-

SIGNAL TRACER/INJECTOR Handy, easy-to-operate versatile instrument with dual power source (9V battery or AC adapter). Two red LEDs on front panel indicate the mode of operation. Ideal for servicing on TV, AM and audio circuitry, plus checking of speakers, microphones and pick-ups. 100 μ A meter, $2\frac{1}{2}"$ speaker 7.8" w x 5.5" h x 3.9" d. 2.7 lbs.

Features: Tracer Portion

- Gain - Max. 60dB at 1KHz
- Attenuation - 0-20-40-60 dB
- Input impedance - 100K ohms
- RF output - 100mV rms appx (up to 35MHz unloaded)
- Output impedance - Output - 600 ohms (unbalanced)
- External speaker - 8 ohms

Features: Injector Portion

- Frequency - appx. 1KHz square wave form
- Output level - 4.5V p-p max., 0 - 4.5 continuously variable

S-MSIGTR \$129.95

**ANALOG MULTIMETER PHILIPS ECG AM-22**

- $\pm 4\%$ DC Accuracy
- 4" Mirrored Scale
- 20K Ohm/Volts DC
- Input sensitivity
- 8K Ohm/Volts AC
- Input sensitivity
- Fuse & diode protection
- 10 A DC range
- 1000 Volts AC/DC
- Continuity Buzzer
- Tilt Stand
- Anti-Skid Pads
- 90-Day limited warranty

General purpose VOM with 7 functions, 20 ranges. **S-Z222 \$27.95**

**PHILIPS ECG DIGITAL MULTIMETER DM-59**

- 0.5% basic DC accuracy
- 3 $\frac{1}{2}$ digit LCD, 0.55" high
- 1.5" x 2.8" x 6", 11oz.
- capacitance to 20 mfd
- frequency to 20 MHz
- 10 A (AC Or DC)
- hFE and diode test
- audible continuity test
- 10 Mohm input resistance
- overload protection
- RF shielded
- polarity indicator
- over range indicator
- low battery indicator
- tilt stand
- 1 year limited warranty

S-ZDM-59 \$54.95

**PHILIPS ECG DIGITAL CAPACITANCE METER**

9 ranges give precision readings from .1pf to 20,000MF, on a 3.5" digital LCD display. Can be used to check virtually all capacitors for tolerance value, selecting matched sets, etc. **S-Z201 \$74.95**

- 0.1 pf to 20,000 mf, 9 ranges
- 0.5% basic accuracy
- 3 $\frac{1}{2}$ digit LCD, 0.5" H.
- Zero adjustment
- Input protected
- Low battery indicator
- Over range indicator
- Rugged construction
- Tilt stand
- 1.5" x 2.8" x 6", 12oz.
- Includes carrying case, test leads, battery, spare fuse and instructions.

**PHILIPS ECG MULTITESTER AM-14**

Pocket size 6 function, 14 range meter. **S-Z230 \$14.95**

- $\pm 4\%$ DC accuracy
- 2 $\frac{1}{4}"$ mirrored scale
- Jeweled meter movement
- 10K ohms/VDC, 4K ohms/VAC input sensitivity
- Fuse and diode protection
- Battery test - 1.5V & 9V
- Color coded scale & panel
- 2 $\frac{1}{2}" \times 4" \times 1\frac{1}{4}"$, 5oz.
- Includes battery, test leads and instruction manual



pose tool for accurate testing at real-world voltages, and precise current measurement for matching purposes. The Maxi-matcher is designed for easy use even by those with minimal training or technical knowledge. Many other functions are available to those with a greater technical interest; since the data for Plate Current and Transconductance are available on the display, Plate Resistance and Gain data may be derived using simple algebra, and all the families of curves and load lines can be generated for a given tube.

Standard tube types testable: 6L6, 5881, EL34, 6V6, 6550, 6CA7, 7581, KT66, KT77, KT88, KT90, KT100

Types testable with optional adaptors: EL84/6BQ5, 7027, 7591, 7868, 807, 811, 845

Plate Voltage: Selectable 325 & 400

Bias Voltages: -60, -48, -36, -24, -12

Filament Voltage: 6.3 Vac

Filament Amps: 6 A

Measurement Types: Plate Current (Ip)

Range: 0 > 199.9 mA DC + or - 1.5%

Transconductance (Gm)

Range: 0 > 19.99 deci-Mhos, + or - 1.5%

Test Frequency: 1 KHz

Short Circuit Test: Any inter-electrode shorts up to 1MEG Ohm, indicated by LEDs

AC input: 120 vac, 75 watts maximum

input power

Dimensions: 8.5" x 12.5" x 2.5"

Shipping weight: 11 lbs boxed

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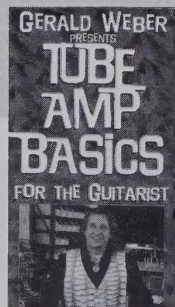
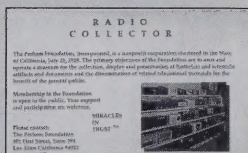
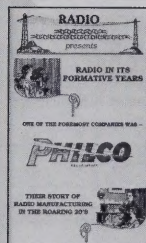
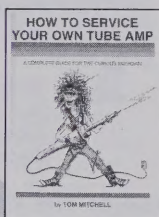
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RADIO COLLECTOR. "Radio Collector" originally aired on PBS television as a 5-part series and was nominated for an Emmy, best informational series. The 130 minute program covers radio history, collecting and restoration techniques. It includes pictures of many collectible radios, as well as interviews with several well-known California collectors. 130 minutes, VHS cassette. 1.0 lb.

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TUBE AMP BASICS FOR THE GUITARIST By Gerald Weber. In this video, you will learn the "plain talk" basics that every tube guitar amp user must know. You will learn common sense troubleshooting techniques that can be done without special equipment, the basic layout of the guitar amp and how to isolate the problems so they can be solved. Also shows the following: correct procedure if a fuse blows, what to do if you plug in and there's no sound, and what contents to have in a "first aid kit" that should go with you to every gig. This video is very basic, if you have any prior knowledge, this is not for you!! 1 hour. VHS cassette, 1 lb.

B-V675 \$24.95

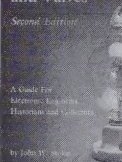


VINTAGE HI-FI, THE GOLDEN ERA 1947-1965. Compiled by Charles Kittleson. The Golden Era of Hi Fidelity in the United States is captured in pictures, as narrator Charles Kittleson shows examples of McIntosh, Marantz, Scott, Altec, Dyna, Fisher, Radiocraftsmen and other classic components from the fifties and sixties. 30 minutes, VHS cassette. 1.0 lb.

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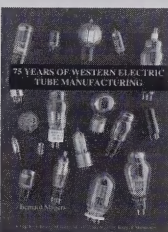
BOOKS - VACUUM TUBE

70 Years of Radio Tubes and Valves



70 YEARS OF RADIO TUBES AND VALVES: Second Edition. By John W. Stokes. Here is the story of the thermionic vacuum tube from its beginning in 1883 and continuing through 1960. It traces the evolution of radio receiving tube design in Britain, Holland, Germany, Canada and Australia, as well as the United States. Company history is presented for DeForest, Ken Rad, Western Electric, Mazda, Mullard, Ediswan, Philips, MOV Valve, Raytheon, Sylvania, GE, Philco, Marconi, Telefunken, Tung-Sol and others. The Second Edition features a new chapter on tubes for audio applications, with 20 additional photos and reproduced magazine ads. Also included is a new index by tube number, facilitating easy access to the information on over 1300 types discussed in this book. 264 pages, 2.0 lbs.

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75 YEARS OF WESTERN ELECTRIC TUBE MANUFACTURING. By Bernard Magers. A Log Book history of over 750 WE tubes. A comprehensive listing of all WE tubes manufactured during their 75 year history. Includes dates of manufacture, description, equipment used in, materials, a summary of tube parameters and manufacture discontinued date. Also covers early history of the Western Electric Co. and their tube activity. Contains hundreds of tube illustrations. Written by a former Western Electric Senior Engineer. 144 pages, 1.0 lb. **B-634** \$16.95



1937 SYLVANIA TUBE MANUAL. Re-print of 1937 tube manual has pin out diagrams and specifications on tubes manufactured by Sylvania in 1937. Tube types range from 01A and X99 to 6K7. Includes 10 pages of general tube information as well as a section of typical radio receiver and amplifier circuits of the day. 183 pages, 0.7 lb.

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BALLAST TUBE

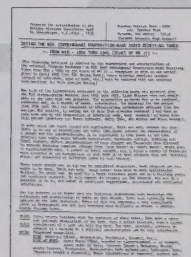


THE BALLAST TUBE HANDBOOK. By A. P. Jacobi. A comprehensive collection of ballast tube data, newly revised and expanded to include a 53 page section on ballast tube substitutions. Lists over 4000 tube numbers. 120 pages, 0.9 lb.

B-573 \$8.95

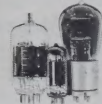
DATING THE RCA (CUNNINGHAM) COMPOSITION-BASE TUBES. By Brother Pat Dowd. A comprehensive paper based on RCA engineering bulletins covering the marking details and date coding of the tubes manufactured between 1924 and 1941. 13 pages, 0.3 lb.

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EARLY VALVES - CHARACTERISTIC DATA FOR ENGLISH AND EUROPEAN RADIO VALVES

FROM THE EARLY 1930's. A facsimile reprint of information and tables from 1933 "Wireless World" Valve Data Supplement. Valve type tables are divided into the following categories: Screen grid; Vari- μ ; Triodes (ACR<7000 Ω); Triodes (ACR>7000 Ω); Output pentodes; Class 'B'; Rectifiers; Metal rectifiers, Miscellaneous; Westectors. 32 pg. **NEW!**

B-828**\$5.00****ELECTRON TUBE LOCATOR**

ELECTRON TUBE LOCATOR. By George H. Fathauer. A comprehensive listing of receiving, transmitting and industrial tube types manufactured in the U.S. and Europe with references to sources of complete data. Includes tube functions, filament/heater characteristics and basing diagrams. Lists approximately 12,000 different tube types. Contains over 300 pages of data and diagrams. 326 pages, 1.5 lbs. **B-662**

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ELECTRON TUBE RESUME. By George H. Fathauer. An abridged version of the "Electron Tube Locator" covering the designation system used by major tube manufacturers in the U.S. and Europe. Includes equivalent tables for U.S. VT types and early Navy types. 30 pages, 0.3 lb. **B-672**

B-672**\$3.00****G.E. TUBES - ESSENTIAL CHARACTERISTICS.**

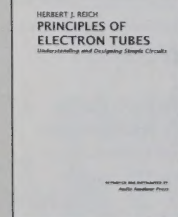
The 1973 edition of G.E.'s tube data book, giving all the characteristics starting with 00A and 01A. Includes foreign to American tube interchangeability chart, industrial/military cross reference, picture tube data and basing diagrams. Also entertainment semiconductors. 473 pages, 1.3 lbs. **B-377**

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HANDBOOK OF RADIO, TV, INDUSTRIAL AND TRANSMITTING TUBE AND VALVE EQUIVALENTS. This British publication lists equivalents and near equivalents for almost 5000 different tube types, including many European types. Includes tables of WWII Civilian, RAF WWII British Army, British Navy, US service type (VT) and CV types crossed to commercial types. Briefly describes US and European tube number schemes. Does not contain any data or specifications. 60 pages, 0.2 lb. **B-677**

B-677**\$5.00****HISTORY OF THE BRITISH RADIO VALVE TO 1940.**

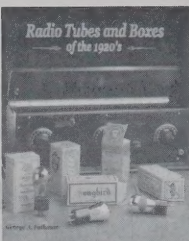
By Keith R. Thrower. A comprehensive history of vacuum tube (valve) development in England from 1904 to 1940 and historical sketches of the major manufacturers. Includes tube data and tube equivalent tables. A valuable resource for identifying and dating early British tubes. Illustrated. 210 pages, 1.6 lbs. **While supply lasts.** **B-641**

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PRINCIPLES OF ELECTRON TUBES. By Herbert J. Reich. First appeared in 1941 as a textbook for beginners studying tube technology. Includes physical concepts, thermionic emission, grid controlled high vacuum tubes, circuit analysis, amplifier design and much more. A must for any library. 398 pages, 1.5 lbs. **B-693**

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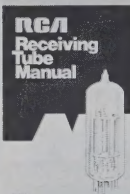
Reprint of early manual giving data and basing diagrams on tubes from 00A through octals and loctals. Includes types BA and BH, Sparton 182B and 183, and 2 pages on early Western Electric types. 35 pages, 0.3 lb. **B-337**

B-337**\$4.95**

RADIO TUBES AND BOXES OF THE 1920's. George A. Fathauer, captures the excitement and intrigue of that first decade of home radio through a pictorial presentation of the radio tubes of the era. With over 400 photos and illustrations of early tubes, it shows the colorful packaging and sometimes unusual construction features employed by tube makers to market their products to the public. Collectors and historians alike will appreciate this entertaining way of revisiting the early days of the electronics industry in the United States. **B-824**

B-824**\$26.95****RCA RECEIVING TUBE MANUAL RC-19**

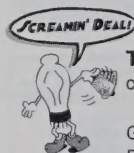
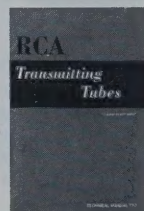
A high quality reprint of the 1959 RCA Receiving Tube Manual (Technical Series RC-19). Includes receiving and picture tube characteristics, basing diagrams, and outline drawings. 380 pages, 1.0 lb. **B-654**

B-654**\$12.95****RCA RECEIVING TUBE MANUAL RC-30**

A high quality reprint of the 1959 RCA Receiving Tube Manual (Technical Series RC-30). Includes tubes not found in RC-19. For example: 6CA7/EL34, 5AR4/GZ34, 6DJ8, 6DN7, 6LF6, 6KG6A/EL509, 6550, 7189, 7591 and the 7868 to name a few. Also includes picture tubes and industrial receiving tubes. 760 pages, 2.0 lb. **B-822**

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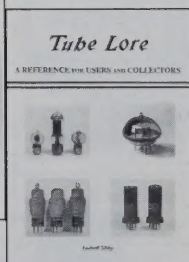
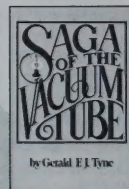
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By Gerald F.J. Tyne. The most comprehensive history of the thermionic vacuum tube. Contains hundreds of photos and essential facts to assist in identifying tubes made prior to 1930, and traces the evolution of tube development with histories of the manufacturers. Truly a classic! 494 pages, 1.4 lbs. **B-736**

B-736**\$18.95****TUBE LORE: A Reference for Users and Collectors.**

By Ludwell Sibley. For the serious tube enthusiast: a collection of tech data, history of design trends, notes on equivalents, stocking-up hints, "where-used" information, etc. Describes regular gridded tubes used in radios, audio amplifiers, and communications gear, plus the unique types in radar and other special applications. Includes 30 page chapter on Western Electric. Has material unavailable in conventional tube manuals: hints on identifying, dating, testing, reactivating, etc. Does not have detailed specs or curves. 186 pages, 1.0 lbs. **B-748**

B-748**\$19.95****TUBE SUBSTITUTION HANDBOOK. Revised Edition.**

William Smith and Barry Buchanan. This is the most accurate, up to date guide available to determine direct substitutions for receiving tubes and picture tubes. 149 pg. 0.5 lbs. **B-825**

B-825**\$19.95**

NEW! Tube Substitution Handbook

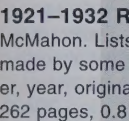
**WESTERN ELECTRIC TUBE DATA, 2nd Ed.**

Hard-to-find data for 44 Western Electric tube types (205D, 300B, 350B, etc.) popular for audio use and early tube collecting. Includes pictures of tubes and complete operating characteristics and curves. 240 pages, 1.5 lbs. **B-659**

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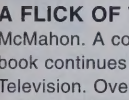
100 YEARS OF BELL TELEPHONES. By Richard Mountjoy. From the Coffin sets of the 1870's to the Princess phones of the 1960's and beyond, this book explores the technology and the history of the telephone. Because the Bell Company was the sole source for much telephone technology until very recently, much of the public access to this information has been quite limited. This definitive work will end much uncertainty by providing a vast amount of information never before published. Design changes are carefully chronicled with 350 color photographs. For those who are restoring a telephone and would like to ensure its historical accuracy, this book will make it easy to match pieces correctly. 175 pages, 1.9 lbs. **B-730 \$29.95**



1921-1932 RADIO COLLECTOR'S GUIDE. By Morgan E. McMahon. Lists key information on over 9,000 radio receivers made by some 1,200 companies prior to 1933. Gives manufacturer, year, original price, cabinet type, and technical information. 262 pages, 0.8 lb. **B-306 \$11.95**



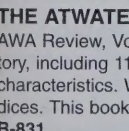
1940 E.H. SCOTT RADIO LABORATORIES CATALOG REPRODUCTION. Reprinted by Kent King. Reproduction of the full line catalog of custom built receivers from E.H. Scott Radio laboratories. Includes the revolution of the time, FM reception. Has several custom built radios and cabinet illustrations and a technical summary of Scott receivers. 32 pages, 0.3 lbs. **B-775 \$12.95**



A FLICK OF THE SWITCH 1930-1950. By Morgan E. McMahon. A companion volume to Vintage Radio 1887-1929, this book continues with the history of radio into the beginnings of Television. Over 1000 pictures. 300 pages, 0.8 lbs. **B-305 \$11.95**



ANTIQUE WIRELESS ASSOCIATION REVIEW, VOLUME 11. Includes papers on all of the Scott receiver products, a comprehensive survey paper on National Company sliding coil receivers plus two other shorter papers of historical interest. 200+ illustrations including pictures of early military RT gear. 234 pages, 1.2 lbs. **B-799 \$24.95**



THE ATWATER KENT RADIOS. By Ralph O. Williams. AWA Review, Volume 12, 320 pages of Atwater Kent history, including 110 illustrations! Lists all radios and their characteristics. With large fold out sheet and 3 appendices. This book is a must have for the Atwater Kent collector. **B-831 \$34.95**



BAKELITE RADIOS. By Robert Hawes in collaboration with Gad Sassower. Begins its story more than 100 years ago, when radio was a scientific toy, soon to be disguised in elaborate cabinets in late 19th century living rooms as it entered into our living rooms. Today, items made in bakelite have become collectors' pieces for their vibrant color and beauty. Over 130 full color photographs provide a remarkable overview of design style through the early decades of the 20th century. Also contains a wealth of info about how to start collecting, what to look out for when purchasing, and how to care for your radio once you own it. Hard cover. 127 pages, 2 lbs. **B-803 \$12.95**



BEHIND THE FRONT PANEL. By David Rutland. This book traces the design and development of 1920's radio from the advent of the vacuum tube to the first AC set. Detailed explanations are provided for regenerative, neutrodyne, TRF, reflex, superheterodyne, and other circuits. Includes dozens of photos of commonly found 20's vintage radios and parts. 160 pages, 0.6 lb. **B-665 \$13.95**



BUYING A USED SHORTWAVE RECEIVER can provide great savings. This book the information you need to intelligently select the right shortwave receiver at the right price. There is information on the 100 most commonly traded shortwave receivers, including both portable and table-top models. - Coverage, Specs, Features, New Price, Used Price, Photograph. **B-826 \$5.95** **NEW!**



CLASSIC PLASTIC RADIOS OF THE 1930'S AND 1940'S. A Collector Guide to Catalin Models. By John Sideli. Over 220 color pictures covering over 50 Catalin plastic radios. Includes descriptions, history, design comments and discussion of the Catalin casting process. Beautiful photography, very nice book. 127 pages, 1.0 lbs. **B-557 \$19.95**



THE COLLECTOR'S GUIDE TO ANTIQUE RADIOS, 4th Ed. By Marty and Sue Bunis. The comprehensive price guide for antique radio collectors. Includes over 5,000 models and over 600 full color pictures. Easy to use format lists radios by manufacturer. Models covered span the years 1920 to 1960. 248 pages, 2.0 lbs. **B-745 \$18.95**



COLLECTOR'S GUIDE TO NOVELTY RADIOS. By Marty Bunis and Robert Breed. Lists over 600 models of transistor radios depicting media stars, advertising products, cartoon characters, automobiles, food and beverages and just about anything else imaginable. Each model is pictured in color and has a description and current market value. 224 pages, 1.6 lbs. **B-671 \$18.95**



COLLECTOR'S GUIDE TO NOVELTY RADIOS, BOOK II By Marty Bunis and Robert F. Breed This book is a continuation of 1st book of Novelty radio collecting. As before a suggested price range is shown for each radio. As with all price guides, values shown are intended only as guides to help price a radio. Advertising and Product-Shaped Radios listed include: Isis, Automotive related, Food related, Lunch Boxes and Vending Machines. 199 pages, 2 lbs. **B-794 \$19.95**



COLLECTOR'S GUIDE TO TRANSISTOR RADIOS, Second Edition. By Marty and Sue Bunis. Over 3200 radios identified, with current collector value. Includes over 350 color pictures, with only a few repeats from the first edition. Features the highly collectable Japanese sets. 320 pages, 1.1 lbs. **B-718 \$16.95**



CRYSTAL CLEAR, Volume 1 Vintage American Crystal Sets, Crystal Detectors and Crystals. By Maurice L. Sievers. A comprehensive guide to crystal sets, detectors and crystals produced in the United States from 1920 to 1955. Lists over 500 crystal sets and 330 detectors made by over 400 different companies. Includes over 400 photos of early sets, plus hundreds of advertisements. 282 pages, 2.2 lbs. **B-568 \$29.95**



CRYSTAL CLEAR, VOLUME 2. Vintage American Crystal Sets, Crystal Detectors and Crystals. By Maurice L. Sievers. A companion to Volume 1. Includes many ads, illustrations and details which would not fit in Volume 1. In addition to many entirely new listings, missing details and a few corrections to listings in Volume 1 are included. 244 pages, 1.9 lbs. **B-698 \$29.95**

COMMUNICATIONS RECEIVERS, THE VACUUM TUBE ERA: Third Edition. By Raymond S. Moore. An alphabetical listing of 51 manufacturers and descriptions of over 700 receivers chronicles the early days of the communications receiver. A brief history of each manufacturer is presented, followed by a numerical listing of the models they produced giving year made, original price, bands covered, tube line-up, circuit description and other comments. Over 300 photographs. 125 pages, 1.2 lb.

While supply lasts!

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COMMUNICATIONS RECEIVERS, THE VACUUM TUBE ERA: Fourth Edition. By Raymond S. Moore. Improved from edition 3 with new typesetting, new and improved pictures, extensive revisions and new information with 19 pages added. 144 pages, 1.2 lbs.

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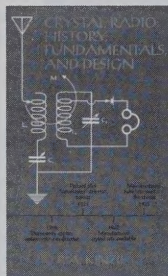
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CRYSTAL RADIO. History, Fundamentals and Design. By P. A. Kinzie. Published by the Xtal Set Society, this book chronicles the fascinating history and development of the crystal detector, including the reasons for its brief dominance of the radio market after the turn of the century. Starting with the discovery of solid-state rectification and then through the development of the crystal detector the reader learns about great inventors such as Pickard, Braun, Dunwoody and others. Radio fundamentals such as antennas, ground, lightning protection, tuned circuits, and detection are covered for the beginner. The unending compromise between selectivity and sensitivity is discussed for the crystal set designer. Advanced topics such as the use of multi-tuned circuits and wave traps follow for the more experienced experimenter. 119 pages, 0.3 lb.

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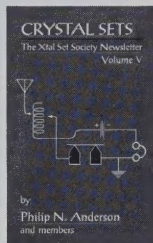
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CRYSTAL SETS. The Xtal Set Society Newsletter, Vol. V. By Philip N. Anderson & members. The Xtal Set Society, started in 1991, is dedicated to once again building and experimenting with radio electronics, through the use of the crystal set. This volume contains articles from 6 of the society's newsletters from 1995. Articles include design of unpowered AM receivers using rocks, radio outfit in a headset, Marconi 107-A tuner and more. 88 pages, 0.3 lb.

B-717

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CRYSTAL SET LOOPERS, A 3 TUBER & MORE, Vol. 8 Edited by the Xtal Set Society. The biggest and best volume yet of the Society Newsletter. Has complete directions for building 5 crystal radios, a 3 tube radio and a homebrew variocoupler. Learn about biasing effects on diode performance and crystal detector experiments. Discover crystal set secrets by reading letters from members all over the world. This book continues to focus on simple, old-time, elegant radio circuits. Includes projects you can build, schematics, radio secrets and theory articles. Build a Short-wave looper, Antenna Tuner/AM trap, a Crystal Set from a deodorant stick and more. 128 pages, 1 lb.

B-819

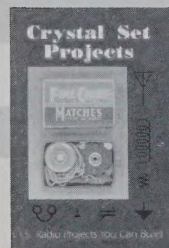
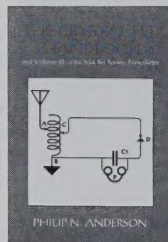
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THE CRYSTAL SET HANDBOOK. By Philip N. Anderson. A practical "how-to" book of crystal radio construction. Contains a simple oat box project, formulas for coil inductance and coil Q, a procedure for measuring coil capacitance and theory for L-C circuit matching. 130 pages, 0.5 lb.

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CRYSTAL SET PROJECTS: 15 Radio Projects You Can Build. Edited by The Xtal Set Society. A collection of 15 radio projects designed by members of the Xtal Set Society. Includes high tech and low tech, vintage and modern, loop antennas and short-wave bands. Great weekend or evening projects. Step back to the roots of radio. 160 pages, 0.5 lb.

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E.H. SCOTT RADIO COLLECTOR'S GUIDE. By Jim Clark. A guide to the "Stradivarius of Radio Receivers" from 1925 to 1946. Split into 5 different eras plus additional sections on E.H. Scott cabinets and accessories. Over 100 pages with many black and white pictures. Spiral bound. 0.8 lb.

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\$29.95



EVOLUTION OF THE RADIO. Edited by Scott Wood. Essentially a picture book, this contains 100 pages of re-produced magazine ads and sales brochures from the 1920's to 1950's, as well as over 100 pages of photographs of old radios reproduced in full-color. Over 1000 radios are pictured altogether. A newly revised 1994 price guide is included giving market values. 216 pages, 1.1 lbs.

B-609

\$22.95



EVOLUTION OF THE RADIO, VOL. 2. Edited by Scott Wood. Contains over 600 full-color pictures of collectable radios dating from 1924 to 1959, with collector prices. 226 pages, 1.2 lbs.

B-643

\$24.95

GENUINE PLASTIC RADIOS OF THE MID-CENTURY, WITH VALUES. By Ken Jupp & Leslie Pina. Mid-century table radios made primarily of brightly colored plastic represent a newcomer to the radio collecting world. With more than 450 full color photographs of radios plus advertisements and black and white vintage photos, this book is a must for anyone interested in radios, mid-century industrial design or popular culture. Hard cover. 219 pages, 3.5 lbs.

B-802

\$39.95



GUIDE TO OLD RADIOS: Pointers, Pictures and Prices. Second Edition. By David and Betty Johnson. Contains more than 3,300 listings with updated prices; organized alphabetically by manufacturers; 350 photos and illustrations which document the evolution of both radio and broadcasting; and two additional chapters on the heyday of radio. 277 pages, 1.4 lbs.

B-715

\$19.95



HEATHKIT - A GUIDE TO THE AMATEUR RADIO PRODUCTS. By Chuck Penson WA7ZZE. A complete guide to the 160 or so principal amateur radio products the Heath company produced from 1952 to 1991. B&W pictures of each product are included with pricing, production time period, and comments. Does not go into great technical detail. Includes a great 31 page history of the Heath company. 248 pages, 1.8 lbs.

B-700

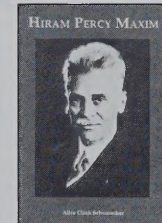
\$24.95



HIRAM PERCY MAXIM. By Alice Clink Schumacher. A biography of the inventor of the Maxim Silencer and a pioneer in the automotive industry. He is honored by hundreds of thousands of hams as the "Father of Amateur Radio". He organized it, guided it, promoted it, and saved it when it was threatened with being legislated out of existence. This book represents his genius and productivity, but also shows his kindness, sincerity, lively sense of humor and his appreciation for life. 216 pp, 1 lb.

B-807

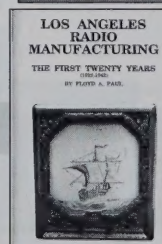
\$19.95



LOS ANGELES RADIO MANUFACTURING, THE FIRST TWENTY YEARS 1922-1942. By Floyd A. Paul. A history of Los Angeles radio manufacturers and their principals from 1922-1942. Covers Advance Electric Co., Lee DeForest Mfg Co., Echophone Radio Co., Gilfillan Bros. Inc., Herbert Horn, Jackson-Bell Co., Patterson Radio Co., Pierson-Delane, Inc., Powell Mfg. Co., Sheldon Radio Co., and Troy Radio Mfg Co. Well illustrated. 88 pages, 0.4 lb. While supplies last

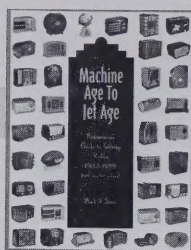
B-523

\$11.90



MACHINE AGE TO JET AGE: Radiomania's Guide to Tabletop Radios 1933-1959. By Mark V. Stein. A comprehensive pictorial price guide to machine age style tabletop radios. 46 major manufacturers are covered, as well as 30 pages on miscellaneous manufacturers. More than 1400 radios pictured. 256 pages, 1.9 lbs.

B-690 \$24.95



MACHINE AGE TO JET AGE II: Radiomania's Guide to Tabletop Radios 1930 - 1959, (with market values). By Mark V. Stein. A supplement to Mark Stein's first book (B-690), this volume has over 350 pages of all new listings, with 2,700 radios pictured and valued. Listings in both volumes now total over 4,000. 200 color photos. This volume is also expanded to include the years 1930 - 1932. A must for the tabletop radio collector. 358 pages, 2.3 lbs.

B-752 \$28.95



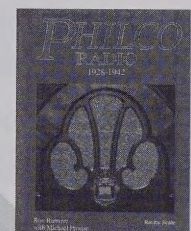
MACHINE AGE TO JET AGE III: Radiomania's Guide to Tabletop Radios 1930-1962. by Mark V. Stein. All new listings, with over 2,800 radios pictured and dated, with tube counts and current collector values. Listings for the 3 volumes of this excellent series now totals 7,000. 256 pp. 1.6 lb.

B-829 \$29.95



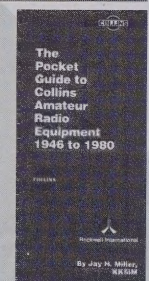
PHILCO RADIO: 1928-1942. By Ron Ramirez with Michael Prossie. A comprehensive reference book on Philco, the leading radio manufacturer during radio's "Golden Age". Contains a year-by-year look at the Philco radio line with specifications for each model. 200 color photographs, 200 b/w photographs and line drawings. 160 pages, 1.5 lbs.

B-644 \$29.95



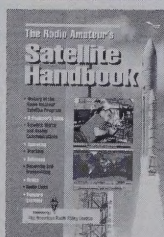
THE POCKET GUIDE TO COLLINS AMATEUR RADIO EQUIPMENT, 1946 to 1980. By Jay H. Miller KK5IM. If you're a COLLINS addict then you must have this book! Comprehensive equipment photographs and descriptions, and specifications necessary to evaluate Collins stuff you have or wish you had. Just the high quality photos and book itself rekindle that feeling of solid, classy American designed and manufactured radio gear from a bygone era. Spiral bound 7" x 3-1/2". 104 pages, 0.3 lb.

B-713 \$19.95



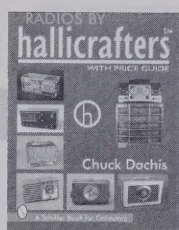
THE RADIO AMATEURS SATELLITE HANDBOOK. By Martin Davidoff, K2UBC. Published by The American Radio Relay League. Are you looking for the most informative and useful book ever written about ham radio satellites? Look no further. Interest in the amateur space program is booming, and there are more ham satellites than ever to choose from. Now is the time to get involved. 15 chapters, plus appendices with detailed profiles of all the active satellites, computer programs, web sites, FCC rules, a glossary and more. 370 pages, 1.9 lbs. While supplies last.

B-798 \$19.95



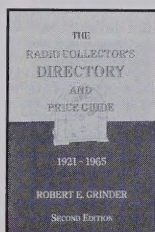
RADIO ART. By Robert Hawes. This colorful coffee-table picture-book traces the evolution of the home radio from the 1920's to the 1950's, with particular attention given to the cabinet as an art object. It features colorful, deco, novelty and outrageously styled radio sets from around the world. Although published in Britain, it includes about 40 American radios among the 260 sets pictured in full color. Hardcover. 128 pages, 2.0 lbs.

B-614 \$10.95



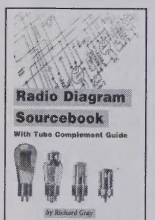
RADIOS BY HALLICRAFTERS, With Price Guide. By Chuck Dachis. This book includes over 1000 photographs (many color) of radio receivers, transmitters, speakers, early television sets, electronic accessories and advertising material. Technical descriptions are provided for every known Hallicrafters model, including dates of production, model numbers, accompanying pieces and original prices. A current price guide is included for collectors. 225 pages, 2.4 lbs.

B-728 \$29.95



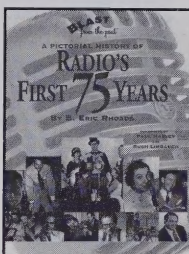
THE RADIO COLLECTOR'S DIRECTORY & PRICE GUIDE, Second Edition. By Robert Grinder. A thorough revision of the first edition, this edition has been expanded from 8,500 to 20,000 models covered, with the range of years covered increased from 1921-1941 to 1921-1965. Trade names covered have more than doubled to over 1400. 524 pages, 1.4 lbs.

B-691 \$26.95



RADIO DIAGRAM SOURCE BOOK. With Tube Complement Guide. By Richard Gray. Need a wiring diagram to repair an old radio, or help identifying a make or model number? This book introduces the collector to various sources of early service literature. Lists over 10,000 U.S. made radios with tube complement, dial lamp and IF frequency used. 269 pages, 1.0 lb.

B-739 \$18.95



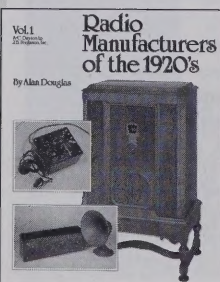
RADIO'S FIRST 75 YEARS A Pictorial History. By B. Eric Rhoads. Get the story on who and what shaped the Radio industry. Almost 1,000 never-before-published photos of radio personalities from every era. This photo book covers Radio from its invention to the present day. This hardcover coffee-table book is a must for Radio lovers. It also includes a never-before-published "RadioFan" directory which gives names and addresses of clubs, museums, newsletters, and sources for old Radio shows, antique Radio collecting, and more! 463 pg, 3.6 lbs. While supplies last

B-716 \$39.99



RADIO HORN SPEAKER ENCYCLOPEDIA. By Floyd A. Paul. A comprehensive listing of every significant horn speaker made in the U.S. for 1920's radios, with background information on 10 major manufacturers. Includes over 120 photos. An excellent identification guide for collectors. 80 pages, 0.6 lbs.

B-362 \$15.90



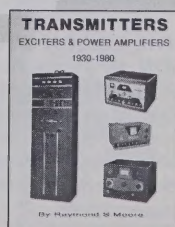
RADIO MANUFACTURERS OF THE 1920'S. By Alan Douglas. This monumental 3 volume work offers an outline history for each of the major radio manufacturers of the 1920's. It features the company principals and their factories, the financial ups and downs of the industry, and hundreds of pictures of radios produced up to 1930. Over 250 pages each volume. 2.0 lbs. each.

Vol. 1 A-C Dayton through J.B Ferguson B-385 Softcover \$24.95
Vol. 2 Freed Elsemann through Preiss B-534 Softcover \$29.95
Vol. 3 RCA through Zenith B-567 Softcover \$29.95

Set of all three
B-RADIO3 \$75.00

TRANSMITTERS. Exciters & Power Amplifiers, 1930 - 1980. By Raymond S. Moore. A concise guide to American made HAM radio transmitters and amplifiers of the tube era. Covers kits and commercial transmitters with their original price and list of accessories. Included is a 5 page history of the development of amateur transmitters from original power oscillator types through the later filter SSB exciters and transmitters. 144 pages, 1.1 lbs.

B-725 \$21.95



TRANSISTOR RADIOS 1954-1968. By Norman Smith. Get ready for a nostalgic trip back to the heyday of portable music. Over 1,000 radios are featured in this book, from American manufacturers such as Admiral and Zenith and from Japanese manufacturers such as Hitachi, Realtime and Sony. All radios are identified by manufacturer, model number, number of transistors, special features, country of origin and date. A complete value guide is included to help the collectors. 160 pages, 2 lbs. **B-801 \$29.95**



VOICES IN THE AIR: THE FASCINATION OF RADIO. By Robert Bonebrake. Anything interesting can turn into a hobby, but in addition to being interested, you must also be fascinated in order for it to become a lasting hobby. Then follows the knowledge of the subject and the satisfaction that comes with it. This journey from interest to knowledge to fascination to satisfaction is chronicled in this book. Has many illustrations, with examples and photographs, of many home-built radio projects. It begins with crystal sets in 1938 and continues to the present time. 174 pages, 1 lb. **B-810 \$12.95**



WAKE OF THE WIRELESSMAN. By B.J. Clemons. The intriguing story of Dale Clemons and his inestimable contribution in pioneering radio and wireless telegraphic communication in the United States Merchant Marine in the early 20th century. The book reads like fiction, but is a true story based on the sea diaries of the author's father, as well as tales told to the author over the years. Rather than focus on hardware and history, she tells a powerful human story. 266 pages. 1.1 lbs. **B-738 \$14.95**



ZENITH RADIO: The Early Years 1919-1935. By Harold Cones, Ph.D., John Bryant, AIA with Martin Blankinship and William Wade. Zenith's "The Quality Goes in Before the Name Goes On" is one of the most recognized, and well earned corporate mottos in America. With access to the Zenith corporate archives and their discovery of the long sealed files of one of Zenith's founders, the authors present for the first time the documented story of the early years of Zenith. The authors present a wealth of never before published photographs, documents and information as well as color portraits of many Zenith radios of the era. Includes a database of valuable information which covers every radio produced by the company, along with a rarity and price guide. 192 pages, 2.0 lbs. **B-770 \$29.95**



ZENITH RADIO SERVICE MANUAL AND PARTS LIST. Re-print of early Zenith service manual. Includes schematics and parts lists for Zenith radios made from 1928 through 1939. Offers help with alignment procedures, antenna alignment, and gives parts lists along with tube layouts on most models. 510 pages, 2.6 lbs. **B-755 \$19.95**



THE ZENITH TRANS-OCEANIC. By John H. Bryant, AIA and Harold N. Cones, Ph.D. The royalty of Radios. The definitive book of perhaps the most popular radio produced during the first 50 years of radio. Complete history as well as collecting and restoration hints. Full of pictures, many in color. 160 pages, 1.7 lbs. **B-689 \$24.95**



BOOKS - RADIO COLLECTING

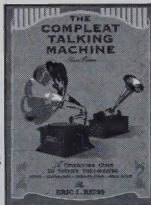
COLUMBIA PHONOGRAPH COMPANION, VOLUME II. By Robert W. Baumbach. This book details the efforts and the accomplishments of the American Graphophone Company and its successors in the production and marketing of the talking machines marked under the Columbia banner, and variously referred to as Graphophones, Grafonolas or Phonographs. Covers all of the disc playing machines from the first in 1899 through the large and expensive machines of the great heyday of the windup phonograph to the beginning of the great depression. This book is intended to be a guide for collectors of any Columbia disc machine. It provides company history and interesting facts relating to the development of the company, its products and the industry as a whole. Hardcover. 257 pages, 1.5 lbs. **B-743 \$29.95**



LOOK FOR THE DOG. By Robert W. Baumbach. An illustrated Guide to Victor Talking Machines, 1901 to 1929. 326 pages cover every model of phonograph Victor produced, with illustrations and descriptions. Also contains a section on servicing notes. This is the most complete book on Victor phonographs available anywhere! 326 pages, 1.1 lbs. **B-646 \$19.95**



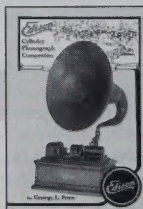
THE COMPLEAT TALKING MACHINE, Third Edition. By Eric L. Reiss. For ten years this book has served as the definitive reference for repair and restoration of antique phonographs. The 2nd Edition continues the same careful analysis of the construction of spring motors, turntables, reproducers, cabinets and their associated parts, with a step-by-step guide to cleaning, lubricating and repairing of all mechanisms and cabinets. Volume 3 again expands with new chapters of how to identify fake machines and how to make home recordings on cylinders. Includes a glossary of phonograph terminology, biographical sketches of twenty individuals who were instrumental in the early development of the phonograph and company histories on Edison, Columbia, Victor and Zon-O Phone. Features an expanded identification guide with photos and descriptions of over 250 wind-up phonographs, and an updated price guide for over 350 outside-horn machines. 249 pages, 2 lbs. **B-800 \$29.95**



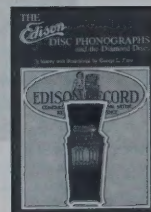
THE SEEBURG ENGINEERING MANUAL. Edited by Mike Zuccaro. A compilation of Seeburg service information on the "Select-O-Matic" mechanism, featuring interviews with George Boesen, designer of the Tormat Selector, and Ed Meixner, Seeburg engineer. 48 pages, 0.5 lb. **B-668 \$14.95**



THE EDISON CYLINDER PHONOGRAPH COMPANION. By George Frow. From the Naughty Nineties to the Roaring Twenties, The Edison Cylinder Phonograph caught most of the tunes and characters of the day. This book traces many models and follows them from production committee, early outlines and into manufacture. Includes illustrations and descriptions of each model from 1877 to 1929. Hard cover. 384 pages, 2.0 lbs. **B-312 \$39.95**

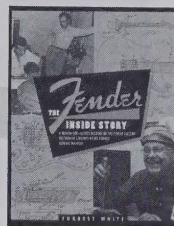
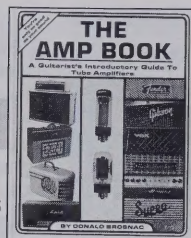


THE EDISON DISC PHONOGRAPHS AND THE DIAMOND DISCS. By George Frow. 296 pages describing all models, giving production figures, promotional schemes and extensively describing production processes for making discs. The most complete history of Edison disc phonographs ever published. Hardcover, excellent quality. 2.0 lbs. **B-311 \$34.95**



THE AMP BOOK. A Guitarist's Introductory Guide to Tube Amplifiers. By Donald Brosnac. Covers what an amp is, how an amp works and what to look for in an amp. Includes history of tube amps from 1932 to the present with de-tailed information on the evolution of amps both internally and externally. Fender, Gibson, Gretsch, Vox, Ampeg as well as others are covered. 64 pages, 0.6 lb.

B-688 \$11.95

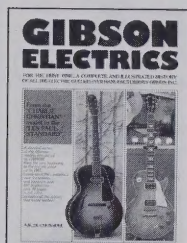
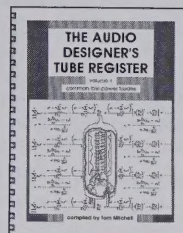


THE FENDER INSIDE STORY. A Behind-The-Scenes Account of the Fender Electric Instrument Company by its Former General Manager. By Forrest White. Even though Leo Fender never learned to play guitar, he made the electric solid-body guitar a commercial success. Despite his style and conservative roots, his radical designs altered popular music forever. Much has been published about the Fender Electric Instrument Co., but Leo always wanted its story to be told "just the way it happened." Now, Forrest White, his friend and only general manager, offers a behind-the-scenes

look at Fender. This book that sets the record straight and dispels the myths about the Fender Electric Instrument Co., a company that changed the look, sound, and personality of American music. 258 pages, 2.0 lbs. **B-785 \$22.95**

THE AUDIO DESIGNER'S TUBE REGISTER. Volume 1, Common Low Power Triodes. By Tom Mitchell. This new reference guide catalogs all the essential parameters of the most popular low power triodes used in audio. The information was compiled and verified in the lab of Tom Mitchell, author of "How to Service Your Own Tube Amp". 144 pages, spiral bound, illustrated, 1.0 lb.

B-651 \$18.00



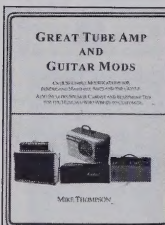
GIBSON ELECTRICS. By A.R. Duchossoir. The first book to present a complete and illustrated history of all guitars ever produced by one of the world's most prestigious musical instrument manufacturers. All info is based on Gibson's own literature and documents. Chapters include the different stages of evolution of the electric guitar, information on serial numbers, and players who helped build the Gibson Electrics reputation. Over 200 illustrations, 32 color pages, 2 lbs.

B-816 \$22.95



BLUE BOOK OF ELECTRIC GUITARS. By Steven Cherne. This 5th edition contains over 40,000 prices, including hundreds of photos and graphics to help identify most new and vintage electric guitars. Also has a lot of technical information and data, including serialization, to help both the novice and seasoned dealer/collector figure the most up-to-date electric guitar pricing and related information. 792 pages, 4.5 lbs.

B-812 \$29.95



GREAT TUBE AMP AND GUITAR MODS. By Mike Thompson. Over 50 useful modifications for Fender and Marshall amps and the guitar. The author lets reader in on some neat little tricks that can be done to their equipment. All modifications are simple and can be done with easy to find parts. Also includes speaker cabinet and equipment tips for the musician who wishes to customize. 150 pages, 1.1 lbs.

B-737 \$12.95

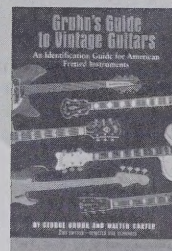


COMPLETE GUIDE TO GUITAR AND AMP MAINTENANCE - A Practical Manual for Every Guitar Player By Ritchie Flieger. From the author of "AMPS!" comes an essential survival guide for every guitar player and amp owner. Packed with concise, clearly written tips on troubleshooting and repairs, with straightforward, step-by-step instructions using readily available tools. Contains over 150 photos. 80 pages, 0.6 lb.

B-701 \$14.95

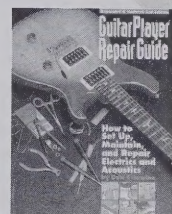
GRUHN'S GUIDE TO VINTAGE GUITARS by George Gruhn & Walter Carter. 2nd Edition. This book is a comprehensive reference for identifying American acoustic and electric guitars, basses, mandolins, banjos and amps. It's an essential guide to help collectors, dealers, players and fans determine the authenticity, rarity and relative value of vintage fretted instruments. The thorough detail and clear organization make it easy to determine an instrument's manufacture, model and date and most importantly, whether it is in original condition.

B-827 \$27.95



GUITAR PLAYER REPAIR GUIDE. How to Set Up, Maintain, and Repair Electrics and Acoustics. By Dan Erlewine. This revised edition is a step-by-step manual to maintaining and repairing electric or acoustic guitars and basses. Players will master the basic maintenance and set up of a guitar. An advanced crafts-person will discover this to be a valuable reference source for complex procedures such as replacing nuts and frets. This second edition incorporates new techniques and tools, plus detailed repair information for specific models. 309 pages, 2.0 lbs.

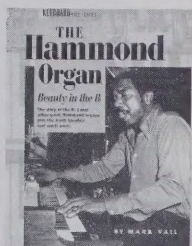
B-784 \$22.95



DAVE FUNK'S TUBE AMP WORKBOOK. Complete Guide to Vintage Tube Amplifiers. Volume 1 - Fender. By Dave Funk. A large, easy to read tube amp book, designed to be an invaluable reference to those working on or building their own tube amps. Learn how to approach a service job, the tools you'll need on your workbench, and how to use them. Loaded with cross-reference material, lookup tables, formulas and the information you'll need to know when your amp is working properly. 421 pages, 2.5 lbs.

B-732 \$38.95

THE HAMMOND ORGAN. Beauty in the B. The Story of the B-3 and Other Great Hammond Organs, plus the Leslie Speaker, and Much More. By Mark Vail. This book celebrates the history and influence of the Hammond B-3 and its right-hand man, Leslie Speaker. It explains the tone-wheel system that renders the famous Hammond sound, and reveals secrets behind the B-3's drawbars, presets, pedalboard, percussion, and other unique features. Also features "25 licks you must know," plus tips from the masters of the B-3. 239 pages, 1.5 lbs. **B-788 \$24.95**



A DESKTOP REFERENCE OF HIP VINTAGE GUITAR AMPS. By Gerald Weber owner of Kendrick Amplifiers. He answers questions about vintage guitar amplifiers on topics such as biasing for output tubes and easy modifications. He includes an analysis of Fender classics such as the Tweed Champ, Tweed Deluxe, Deluxe Reverb, Super Reverb and others. Also included are schematics for Ampeg, Fender, Gibson, Hiwatt, Magnatone, Marshall, Rickenbacker, Silvertone and Vox amps. 500 pages, 1.5 lbs. **B-663 \$26.95**

THE HIGH PERFORMANCE MARSHALL HANDBOOK. A Guide to Great Marshall Amplifier Sounds. By John Boehnlein. Includes chapters on standard amplifiers from 1962 to 1990, retubing for maximum performance, how to overdrive master volume and much more. 55 pages, 0.5 lbs. **B-696 \$13.95**



THE HISTORY OF MARSHALL. By Michael Doyle. The definitive account of the guitar manufacturer known as the "sound of rock." Includes complete listings of every product Marshall ever made, over 100 schematics, the history of the Celestion speaker and early catalog reprints. Hundreds of photographs, including 64 color plates. 254 pages, 2.1 lbs.

B-661

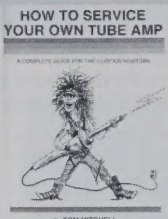
\$32.95



HOW TO SERVICE YOUR OWN TUBE AMP. By Tom Mitchell. A well organized and easy-to-understand approach to guitar amplifier repair covering basic electronics, reading schematics, understanding tubes and transformers, tube biasing and use of test equipment. Also provides 10 troubleshooting flowcharts, voltage charts for typical amplifiers, and many modifications that you can do yourself. Same as BV-578 but without video cassette. 250 pages, 2.3 lbs.

B-707

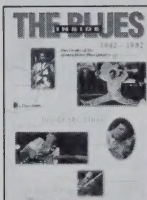
\$29.95



INSIDE THE BLUES. By Dave Rubin. This book captures the styles and techniques of four decades' worth of great electric blues guitarists. Features photos, biographies, discographies and explanations and notated examples of the rhythm and lead styles of legendary guitar players. Performers featured include: T-Bone Walker, B.B. King, Stevie Ray Vaughan, John Lee Hooker and many more. 176 pages, 1.5 lbs.

B-817

\$24.95



INSIDE TUBE AMPS. The Book on Tube Amps Technology. By Dan Torres. This book is written for musicians, not technicians. This book will help you get your personal sonic signature, and give you the knowledge to change it when your tastes change. Some approaches are new and experimental, some are very old. Looks at "standard practices" as well as tricks and techniques outside of the "perfect specs". 310 pages, 1.9 lbs.

B-733

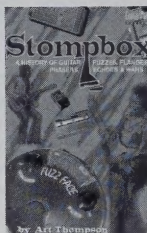
\$34.95



STOMPBOX. A History of Guitar Fuzzes, Flangers, Phaser, Echos, & Wahs. By Art Thompson. Musicians, engineers and entrepreneurs give behind-the-scenes tales of the events that led to the new guitar effects of the '60s, '70s and '80s. With their odd shapes, wild colors, and strange names, stompboxes and their stories finally get their credit. Over 200 photos. 159 pages, 1.0 lb.

B-786

\$24.95



THE OFFICIAL VINTAGE GUITAR® PRICE GUIDE. By Alan Greenwood. From *Vintage Guitar*, America's largest and most recognized magazine on classic vintage guitar and amps. This authoritative and up-to-date guide offers thousands of market values on hundreds of brands and models of guitars, amps, basses, effects pedals and more. Fully indexed, easy to use and understand, and now complete with hard to find historical information on most brands. 207 pages, 1.3 lbs.

B-762

\$19.95



TONNES OF TONE

ELECTRONIC PROJECTS FOR GUITAR AND BASS

By Kevin O'Connor

TONNES OF TONE. By Kevin O'Connor. A collection of projects for electric guitar and bass players. Save money by building your own acoustic preamp; build a two-channel tube preamp for guitar, and more. Construct a 15W tube power amp or a true class-A solid state amp. The "experimenter's power supply" is excellent for tinkering with tube circuits, containing separate AC heater, DC heater plate and bias supplies. Build a wide range tremolo circuit and an all-tube reverb unit. Circuit operation, construction, & layout guidelines are provided. Every project uses easy to find parts. 105 pages, 1.0 lb.

B-749

\$25.00



THE TUBE AMP BOOK, 4th Ed. By Aspen Pittman. Newly revised and expanded, the 4th Edition contains company histories of guitar amp manufacturers. 460 pages of schematics for popular amps, tube data on commonly used audio tubes and 50 pages of "Vintage Fantasy" color pictures of collectible guitars and amps. 765 pages, 2.1 lbs.

B-581

\$29.95



TUBE AMP TALK FOR THE GUITARIST AND TECH. By Gerald Weber. A compilation of articles written for *Vintage Guitar* magazine from 1993 to 1996. Includes sections with articles on servicing your guitar amp, modifications, and also includes a "Trainwreck" section full of articles written by Ken Fischer for *Vintage Guitar*. Forward is written by Billy F. Gibbons. 537 pages, 2 lbs.

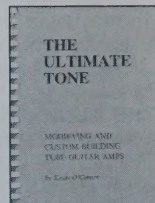
B-773

\$29.95

THE ULTIMATE TONE. Modifying and Custom Building Tube Guitar Amps. By Kevin O'Connor. Offers the technician or hobbyist information for properly implementing guitar amplifier modifications. Topics include stage setups, amplifier brand surveys, vacuum tube and power supply operation, pre-amp circuits and master volume, tube type comparison, and effect loops. Includes an extensive discussion of switching methods. Includes data for 17 common tube types and for two Hammond Mfg. transformer model lines. Spiral bound, 395 figures. 368 pages, 2.5 lbs.

B-695

\$55.00



THE ULTIMATE TONE Volume 2. By Kevin O'Connor. The achievement of great, live sound is the premise used to explore modern high-gain guitar pre-amps; proper treatment of acoustic instruments; tube vocal PA's; dynamic bass gear; all types of tube, semi, hybrid and alternative power amplifier design; power supply mods that are "toneful"; simple switching methods; speaker cabinet design; getting the most from effects loops and chains; and, modular stage monitoring systems that work! Circuits are explained so the tinkerer can build or modify guitar equipment with confidence and success. Spiral bound. 200 figures. 250 pages, 1.9 lbs.

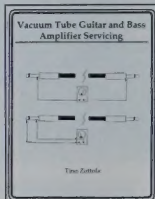
B-772

\$40.00

VACUUM TUBE GUITAR AND BASS AMPLIFIER SERVICING. By Tino Zottola. Guitar amp repair is split into several categories: User serviceable problems (fixable without chassis removal), dead and strange sounding amps. Includes sections on amp disassembly, preventative maintenance, special effects repair, signal tracing, component testing and replacement, bias adjustment, tube matching and amp mods. It's assumed the reader knows basic electronic theory, reading schematics, and can use tools and test equipment. 84 pp, 0.8 lb.

B-736

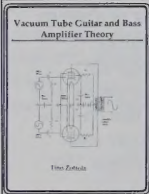
\$12.95



VACUUM TUBE GUITAR AND BASS AMPLIFIER THEORY. By Tino Zottola. Describes the history and operation of vacuum tubes as well as how they are used in guitar/bass amplifier circuits. Amplifier electrical and physical layout is then examined. The factors affecting amplifier sound are also described. Included in the appendices is useful data such as: resistor and capacitor codes, vacuum tube electrical data, wire gauge table, and musical scale frequency chart. 59 pages, 0.6 lb.

B-735

\$12.95



BOOKS - EARLY TELEVISION



THE INVENTION OF TELEVISION. By Harry Shelton. Details the evolution of the television receiver from motion pictures and radio to its present day form. Covers the principles of early scanning disc systems as well as modern electronic systems and color TV. Also follows the rise of the television networks. 140 pages, 0.4 lb.

B-545

\$12.95

THE GOLDEN AGE OF TELEVISIONS. By Philip Collins. The rise of a potent medium in the world is charted through the pages of this visual odyssey. It reminds us of the great names of electronic ancestry: Philco, Dumont, Silverstone, Crosley, Airline, RCA, Emerson, Arvin, Admiral and Motorola. 4 color picture book, soft cover, 128 glossy pages. 1.3 lbs.

B-776

\$15.95



TUBE The Invention of Television. By David E. Fisher and Marshall Jon Fisher. Who invented television? How did the invention come to be? Fifty years after television's commercial debut, TUBE answers these questions and more. An anecdotal history that reads like an adventure story, TUBE follows the competing and criss-crossing lives of television's primary inventors: John Logie Baird, Philo T. Farnsworth, Vladimir Zworykin and David Sarnoff. Hard cover, 427 pages (plus 16 pages of black & white pictures), 1.9 lbs.

B-760

\$15.00



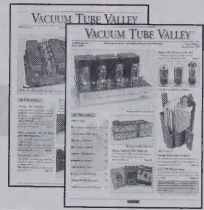
VACUUM TUBE VALLEY

Edited by Charles Kittleson. Very high quality quarterly publication for electronic enthusiasts interested in the colorful past, present and future of vacuum tube electronics. All issues still available, get the whole set. Check with us for the new quarterly issues as they come out during the year. Fantastic reading and pictures. Warning! Once you read one, you'll want all of them!



VACUUM TUBE VALLEY SET OF 12 VOLUMES
 Edited by Charles Kittleson
 Buy all 12 volumes of Vacuum Tube Valley and save 10% off buying individually.
Set Price \$95.40
B-VTV12

- Issue 7** - 40 pages, includes articles on the 6DJ8 family of tubes and other frame grid tubes, vacuum tube computers, big time theatre sound with Altec Lansing and the Peter Jensen Story. All the regular VTV columns are there also. 0.2 lbs.
B-217 \$9.00
- Issue 8** - 42 pages, contains articles on RCA tube manufacturing, sweep tube OTL amp, a listening evaluation of 300B tubes, a review of the Radiotron Designer's Handbook, and an interview with Bruce Moore. 0.3 lbs
B-218 \$9.00
- Issue 9** - 42 pages, includes features on the 211 and 845 tubes, transmitting tube test amp, the Ampeg SVT, the 3rd in a series of the first personal computer (yes, they had tubes!), the Altec 287W and on bargain vintage hi-fi. 0.3 lbs.
B-219 \$9.00

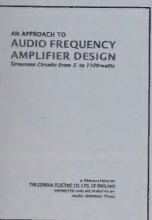


- Issue 1** - 16 pages, includes articles on the early years of Dynaco, early amplification, tubes vs. transistors, how to screen tubes and review of the 12AX7 family of tubes. 0.1 lb.
B-211 \$8.00
- Issue 2** - 24 pages, includes articles on matching audio tubes, the "Golden Age" of Heathkit, early amplification, vintage book reviews, review of WE amps from the 1930's and a review of the EL34/6CA7 family of tubes. 0.2 lbs. **B-212 \$8.00**

- Issue 3** - 38 pages of history and information, including articles on E.H. Scott radios, Altec Lansing 604, history of the 300B, EICO, McIntosh M1200, single-ended transformer testing, Dynaco Stereo 70 mods and more. 0.2 lbs.
B-213 \$9.00
- Issue 4** - 40 pages, includes articles on the 60th anniversary of the 6L6 family, the Harmon Kardon Citation series, an article on why the FM band is 88-108 MHz, a review of tube manuals, AC meters, guitar amp biasing, inexpensive vintage bookshelf speakers and more. 0.2 lbs. **B-214 \$9.00**
- Issue 5** - 40 pages, includes an interview with Marantz's Sid Smith and Dick Sequerra, Uncle Eric's (Barbour) deluxe SV-811 single ended project, the ultimate FM tuner shoot-out with both vintage and modern gear, a VTV visit to Hong Kong's vintage Hi-Fi scene, 1950's guided missile tubes for Hi-Fi use, book reviews and more. 0.2 lbs. **B-215 \$9.00**
- Issue 6** - 40 pages, details the history of the Fisher 500 family with a tribute to Avery Fisher, has articles on the Lofton-White amplifier, the 6550/KT88 tube family, the little known 5687 tube, the Randall Amplifier, plus book review and test bench. 0.2 lbs.
B-216 \$9.00

- Issue 10** - 6V6 History and Listening Test; Bruce Moore Interview, Part 2; Maxi-Matcher Tube Tester Review; 35 Watt Triode Amp Project; Distortion Analysers; Dumpster Tube: 6AV5; and More. 1 lb. **B-220 \$9.00**
- Issue 11** - This volume features the history and testing of 6SN7, a VTV octal line stage project, a kit review of the Asusua A-4 kit, a capacitor listening test and the dumpster tube is the 6688. **B-221 \$9.00**
- Issue 12** - 2A3 History/Listening test; 300B Amp Project; Allen Amplification guitar amp review; Modern bookshelf speakers; Scott 299/299B History and Upgrade; Guitar amp books Dumpster Rectifiers. **B-222 \$9.00**

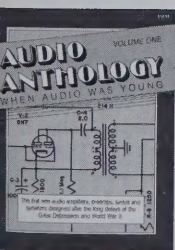
BOOKS - VACUUM TUBE VALLEY



AN APPROACH TO AUDIO FREQUENCY AMPLIFIER DESIGN. First published in 1957 by the Valves and Electronics Department of General Electric Company of England, this book covers the essential details and circuit diagrams of a wide range of audio frequency amplifiers from a 5 watt ultra-linear to an 1100 watt Class AB2 amplifier. All designs are based on vacuum tubes. Full parts list accompanies each schematic. 126 pages, 0.6 lb.
B-679 \$19.95

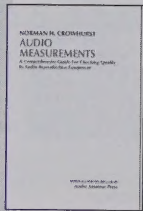


AUDIO! AUDIO! By Jonathan Hill. A comprehensive directory of classic audio amplifiers and control units. Contains intimate details of over 850 different models from nearly 150 British manufacturers. It's a 1990's rediscovery of something many people in the golden age of hi-fi knew about; that given the right equipment, British valve amplifiers look and sound pretty amazing. If you are a collector you can look up specifications and information on the models you might have in your collection or simply dream about those you have not!! 95 pages, 1.5 lbs. **B-815 \$18.95**



AUDIO ANTHOLOGY. Edited by C.G. McProud. This re-print series consists of construction and informational articles which originally appeared in Audio Engineering magazine in the late 40's and early 50's. They feature amplifiers, tuners, phono equalizers, noise suppressors, phonographs, tape rec-orders, speaker enclosures and more. Over 120 pages, each volume. 0.9 lb. each.

Vol. 1 (1947-1949)	B-525	\$16.95
Vol. 2 (1950-1952)	B-535	\$16.95
Vol. 3 (1952-1955)	B-548	\$16.95
Vol. 4 (1955-1957)	B-601	\$16.95
Vol. 5 (1957-1959)	B-636	\$16.95
Vol. 6 (1960-1961)	B-692	\$16.95



AUDIO MEASUREMENTS. By Norman H. Crowhurst. This book begins with measurement techniques and follows with a full discussion of all manner of test equipment. Although it deals with the equipment of the day, most based on vacuum tubes, much of that equipment is still available. Fully indexed, the book is a comprehensive and informative volume on determining the quality and performance level of almost any piece of audio equipment. 223 pages, 1 lb. **B-814 \$12.95**



AUDIO REALITY By Bruce Rozenblit There are 6 projects in this book that you can build. Contains complete schematics, parts lists and circuit explanations. All design techniques are revealed. In addition the author shares tips and procedures for working with sheet metal and wiring. Projects include: the patented Transcendent OTL in both 25 and 80 watt version, the grounded grid preamp, the super compact 150 watt amp, the cathode follower single-ended amp, and a new phono preamp design. This book has sections on conductors, connectors, speaker cables, damping systems, feedback, vacuum tubes and more. 128 pages, 1 lb. **B-818 \$24.95**

Complete set of 6 volumes, **SAVE 10%**
B-AUDIO6 \$91.50

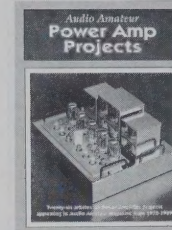
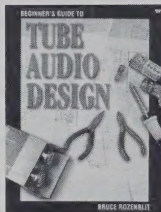
BOOKS - AUDIO

BACK-TO-BASICS AUDIO. By Julian Nathan. A thorough yet approachable handbook on audio theory, practice, and allied electrical systems. Electrical principles are first discussed in easy to understand terms as a basis for understanding audio components and equipment, covered in hands-on style in the rest of the book. Elements of home theater audio and projection are also addressed in practical terms. 344 pages, 1.5 lbs. **B-806 \$39.95**



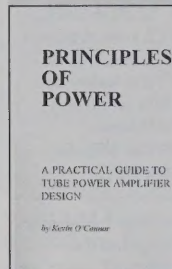
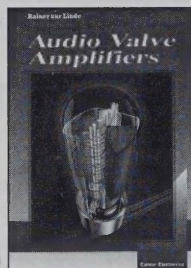
MULLARD CIRCUITS FOR AUDIO AMPLIFIER reprint of a 1959 publication of Mullard Ltd., detailing high-quality circuits for audio amplifiers, pre-amplifiers and other stereophonic reproduction equipment. These designs were originated by Mullard engineers at the Mullard Applications Research Laboratory, and originally appeared in various magazine articles with notes on construction and assembly. 136 pages, 1.0 lb. **B-655 \$16.95**

BEGINNER'S GUIDE TO TUBE AUDIO DESIGN. By Bruce Rozenblit. Are you interested in tube audio but don't know where to start, or are you already using tubes but don't know what's going on in the circuit? Rozenblit describes with simple clear explanations what a tube is, how it works, how to read characteristic curves and understand specifications. He then discusses one stage amplifiers, gain circuits, negative feedback, power supplies as well as a tour of amplifier parts of all types. 132 pages, 1.0 lb. **B-761 \$24.95**



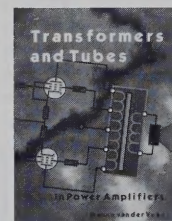
POWER AMP PROJECTS: 26 Articles on Power Amplifier Projects Appearing in Audio Amateur Magazine from 1970 - 1989. Re-printed articles on amplifiers for the home (both tube and solid state), amplifiers for a car and even an electrostatic speaker system. Original designs as well as upgrades to older equipment. Article authors include Roger Sanders, Nelson Pass, Reg Williams, Emo Borbely and more. Altogether this book offers designs from authors from six countries to fit almost any need for the resourceful amateur who prefers the pleasure of building his or her own. 201 pages, 1.1 lbs. **B-754 \$19.95**

BUILD YOUR OWN AUDIO VALVE AMPLIFIER. By Rainer zur Linde. Whether it is nostalgia, interest in technical parameters, the appeal of a gleaming amplifier chassis with softly glowing valves, or the firm conviction that the sound of a valve amplifier cannot be bettered, interest in building your own tube audio equipment is growing. Includes construction projects for pre-amplifiers, power amplifiers and musical instruments amplifiers. Aimed at the practical audio/hi-fi enthusiast, this book offers much information on the operation on tubes and includes a chapter on the history of the tube. 251 pp, 1.1 lbs. **B-727 \$28.00**



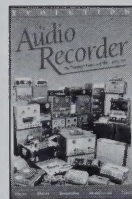
PRINCIPLES OF POWER A Practical Guide to Tube Power Amplifier Design. By Kevin O'Connor. Offers a simplified method for designing tube power amps for audio. Tube operation is explained, as are circuit principles. Class-A or B, cathode, fixed bias, and push-pull and single-ended designs are covered, as are many front-end circuits. Includes designs using off-the-shelf transformers and current production tubes. Power outputs of 15 to 400W are depicted using pentodes and true triodes. Also, covers power supplies, selected tube data, and information on Hammond and Plitron transformers. 210 schematics. 221 pages, 1.7 lbs. **B-726 \$35.00**

ELECTRONIC CLASSICS Collecting, Restoration and Repair. Andrew Emmerson. Vintage radio, television, and hi-fi offer specific challenges. Some of these include buying, restoring, collecting, sourcing parts and repairing. This book covers all of these aspects and the technical side as well, making it the most comprehensive coverage available. **B-805 \$39.95**

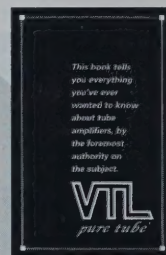


TRANSFORMERS AND TUBES IN POWER AMPLIFIERS. By Menno vander Veen. Covers in detail the use of transformers in tube audio circuits. Starts with the basics and works up to the complex, including mathematics and formulas used for transformer applications. Attention is given to toroidal transformers, but the information can be applied to all tube amplifiers. 60+ pages, 1.1 lbs. **B-740 \$26.00**

EVOLUTION OF THE AUDIO RECORDER. By Phil Van Praag. Finally, a comprehensive guide to the audio recorder, this book explains the mysteries and tracks the evolution of the audio recorder. Provides repair and restoration guidelines, buying tips, identification criteria and pricing guidelines. Covers over 125 brand names, with over 500 photos and illustrations. The definitive guide to vintage wire and tape recorders. 500 pages, 1.1 lbs. **B-759 \$39.95**



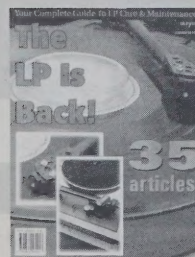
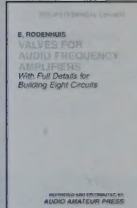
THE VACUUM TUBE LOGIC BOOK, 2nd Ed. By David Manley. From the designer of the VTL audio equipment comes this book about the use of vacuum tubes in today's high-end audio systems. Topics covered include measurements of sound, speakers, cables and interconnects, pre-amplifiers, power amplifiers, transformers and more. Also gives schematics of audio circuits and characteristics of selected audio tubes. 184 pages, 0.8 lb. **B-664 \$19.50**



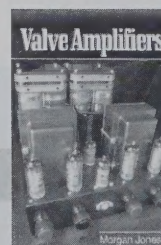
HOME AUDIO. Choosing, Maintaining and Repairing Your Audio System. By Andrew Yoder. Don't invest in a home entertainment system until you read this book. The author of *Auto Audio* tells exactly how to put together the custom system of your dreams. Chapters cover: choosing a system, amplifiers, tape decks, digital discs, turntables, speakers, speaker enclosures, filters and crossovers, wire, antennas, shortwave, antique audio and repair. 381 pg, 1.8 lbs. While supplies last **B-796 (Sale price) \$19.95**



VALVES FOR AUDIO FREQUENCY AMPLIFIERS. With Details for Building 8 Circuits. Reprinted from the Philips Technical Library, by Audio Amateur Press. Philips, one of the world's oldest tube manufacturers, offered this manual for enthusiast in 1954. It's a practical volume for building quality audio amplifiers. Topics include: using the operating data provided, feedback, tone control, the output transformer, amp-lifier input circuits, microphone, gramophone pickups, & loudspeakers. There are pointers to keep control of hum, noise, interference and heat to avoid noisy and destructive operation. 144 pages, 0.5 lbs. **B-779 \$16.95**



THE LP IS BACK! From the pages of *Audio Amateur* magazine and other sources, absolutely everything the serious LP music collector needs to get the most out of both vintage records and the highest quality new pressings. Articles cover: Cleaning discs, How to build a cleaning machine, Calibrating and maintaining your tonearm and cartridge, Equipment which will improve the quality of long play record listening. Collected from the high point of this old-new again technology, *The LP is Back!* brings a wealth of information to help you keep your equipment in top form and help you understand and appreciate the best in new products available from cartridges to turntables. **B-823 \$7.95**



VALVE AMPLIFIERS. By Morgan Jones. This book allows those with limited knowledge of tube electronics to understand both the theory and practice of tube audio amp design, such that they can analyze and modify circuits, and rebuild an amp. Constructional techniques are shown so readers can build from designs that actually work. The Mullard 5-20, Quad II and Williamson amps are analyzed as examples of complete systems, before showing an example of a simple but elegant 10W design. Pre-amplifier design is investigated with design of a high quality pre-amp suitable for use with the 10W amp. Packed with theory, circuit analysis and DIY basics. 374 pages, 1.2 lbs. **B-734 \$44.95**

VINTAGE HI-FI PRICE GUIDE 1997-1998. By

Charles Kittleson. A companion to the "Vintage Hi-Fi Spotter's Guides I and II". Prices are for domestic US sales and do not apply to the retail export market. Equipment is listed by manufacturer and model number, the volume and page number from the Spotter's Guide can be found listed with the information about the radio. Collector notes such as rare, low production and undervalued, export item, etc. are listed. 24 pages, 1 lb.

B-804

\$19.95



VINTAGE HI-FI SPOTTER'S GUIDE, VOL. 2.

Compiled by Charles Kittleson. Supplement to above book covering 1925-1963 vintage Hi-Fi components. Includes amplifiers, pre-amps, speakers, phonographs, receivers and other equipment not covered in volume 1. 88 pages, 0.6 lb.

B-639

\$18.50



VINTAGE HI-FI SPOTTER'S GUIDE. Compiled by Charles Kittleson. A copy of catalog pages and advertisements of 1950-1962 vintage Hi-Fi components, providing a valuable resource for identification and information. Includes Fisher, Eico, Heathkit, McIntosh, Scott, Harman-Kardon, Marantz, Pilot, Dynaco, Radio Craftsmen and others. 87 pages, 0.6 lb.

B-597

\$18.50

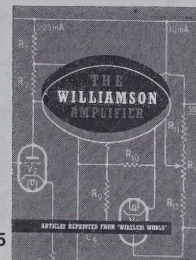


THE WILLIAMSON AMPLIFIER. By D.T.N.

Williamson. In 1947 Williamson began the high fidelity movement with his power amplifier, using high quality push/pull output tubes, a special output transformer and a highly filtered power supply. In the mid-1950's Wireless World published his articles on amplifier, pre-amp and tuner design. This reprint contains data on winding your own transformers, chassis layout diagrams and practical advice on building amplifiers. 37 pages. 0.3 lb.

B-560

\$4.95



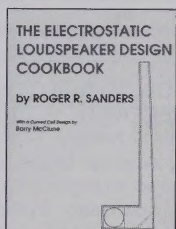
BOOKS - AUDIO

THE ELECTROSTATIC LOUDSPEAKER DESIGN COOKBOOK.

By Roger R. Sanders. This volume is an encyclopedic exploration of all the important issues, tradeoffs, and technical questions involved in building electrostatic speakers. Construction advice for both flat and curved panels is offered, along with plans for the necessary interfaces, drive requirements, and power supply and crossover suggestions. Sure to be a must for all speaker builders. 202 pages, 1.1 lbs.

B-721

\$34.95

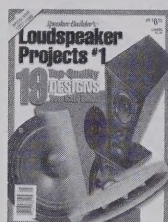


INTRODUCTION TO LOUDSPEAKER DESIGN. By John

L. Murphy. For all hobbyists, students and engineers that are interested in an overview of the technology of loudspeakers. Topics include design tradeoffs, spatial loading, diffraction loss, cavity effect and enclosure construction. There is also a complete chapter about crossover design. 166 pages, 1 lb.

B-811

\$24.95



LOUDSPEAKER PROJECTS #1. 19 Top Quality

Designs You Can Build. From Speaker Builder. This special is the first in a series of loudspeaker construction project issues translated from the Dutch electronics magazine, Elektuur. Included are nineteen high quality do-it-yourself loudspeaker projects featuring all information: instructions, parts lists, a schematic of the crossover and photos and diagrams as needed to complete each project. Performance measurements are also available for each project. 1997, 89 pages, 8" x 10-1/2", 0.6 lbs.

B-783

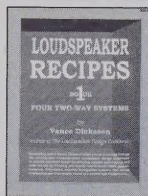
\$6.95

LOUDSPEAKER RECIPES, BOOK 1. By Vance Dickason.

Lays a firm groundwork, both theoretical and practical, for building as may varied and successful two-way loudspeakers as you wish. Helps you look for the right driver characteristics to be paired successfully with the right crossover components and also how to fix any anomalies which may trouble your particular choices. This book benefits from the latest techniques for computer-aided design, but is also rich in proven construction practices for building practical systems. 112 pages, 1 lb.

B-813

\$19.95



THE LOUDSPEAKER DESIGN COOKBOOK, FIFTH ED.

By Vance Dickason. With more than 40,000 copies in print in three languages, this venerable standby is easily the world-wide best seller in its field. Newly updated and expanded, with additional chapters on auto sound and home theater, this fifth edition promises to retain the LDC's position at the very top of the speaker information field. Popular with people of all ages, all degrees of expertise, and all types of audio interest. 142 pages, 1.3 lbs.

B-722

\$34.95

BOOKS - SPEAKERS

1928 RADIO TROUBLESHOOTING: A complete and Practical Work on Radio Receiver Troubles and How to Cure Them.

By Enno R. Haan. A re-print of great 1928 nuts and bolts book by a then editor of Popular Mechanics. Within each chapter are informative details on tube testing and rejuvenation, filament circuit troubles, how to neutralize a neutrodyne, fixing open circuited loudspeakers, care of headphones and much more. Includes a troubleshooting section and six pages of tube specifications for types such as UX201A, Ceco A,H and K, DeForest DV-5, DL-4, DL-2 and others. Many great line art illustrations. 317 pages, 1.1 lbs.

B-766

\$12.95



ATWATER KENT RADIO SERVICE MANUAL. A reprint of the 1928 A.K. factory service manual, covering models 10, 10B, 12, 20, 20C, 30, 32, 33, 35, 36, 37, 38, 40, 42, 44, 48, 49, 50 and 52. Spiral bound. 98 pages, 0.8 lb.

B-356

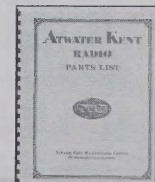
\$12.95

ATWATER KENT RADIO PARTS LIST. A

companion book to the 1928 A.K. Service Manual (B-356), this reprint shows chassis views and parts identification for all the models listed above. Spiral bound. 64 pages, 0.5 lb.

B-357

\$11.95

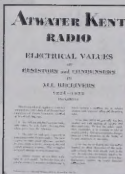


1934 OFFICIAL SHORTWAVE RADIO MANUAL.

Edited by Hugo Gernsback. A high-quality reprint of Gernsback's 1934 "Complete Experimenter's Set-Building and Servicing Guide," including a "Full Directory of All Short Wave Receivers." Contains schematics of over one hundred different commercial receivers, along with a construction section showing how to build many early short wave receiving and transmitting circuits. 260 pages, 1.7 lbs.

B-390

\$15.95



ATWATER KENT RADIO, ELECTRICAL VALUES OF RESISTORS & CONDENSERS.

Reprint of 1932 Atwater Kent special service manual gives values for resistors and condensers used in every receiver up to 1933. This hard-to-find information is normally not given on Riders or original A.K. schematics. Values may be looked up by A.K. part number or radio model number. 24 pp, 0.1 lb.

B-574

\$6.95

SET OF THREE A.K. BOOKS - SAVE OVER 10%!

B-AKSET

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BOOKS - TECHNICAL

Schematic Service

We maintain a huge library of service information for early radios, TV's and other early tube gear. Copies of early radio schematics for known make & model are available for \$6.50. TV schematics, or radio schematics where make or model is unknown are available for \$11.00. Contact us with your needs, we can probably provide what you're looking for.

ANTIQUE RADIO RESTORATION GUIDE, 2nd Ed. By David Johnson. Teaches basic technique for troubleshooting and repairing old radios, refinishing cabinets, and following necessary safety precautions. Also contains useful information such as sources for parts, schematics, a glossary of terms and more. 160 pages, well illustrated. 1.0 lb.

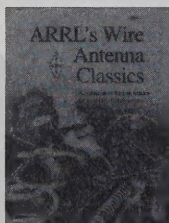
B-627

\$15.95



ARRL'S WIRE ANTENNA CLASSICS A collection of articles from ARRL Publications Hung high or low, wires are the best antennas to use to get on the air easily and inexpensively. Hams who have built their own antennas can definitely tell you that wire antennas can give top notch performance. In this book you will find proven antenna designs from QST and other ARRL publications. Has chapters on Dipoles, Loops, Collinear, Wire Beams, and Receiving Antennas. 1 lb. **B-620**

\$14.00



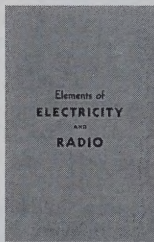
COMPLETE INSTRUCTIONS FOR ADJUSTING ALL PHILCO RADIOS. Reprint of 1934 factory alignment instructions covering all Philco receivers to that time. Shows chassis layouts and adjustment locations for over 50 models. 35 pages, 0.3 lb. **B-554**

\$5.00



ELEMENTS OF ELECTRICITY AND RADIO. Re-print of the original basic electricity and electronics course from the US Navy. Has chapters on mathematical principals (everyone's favorite!), to elementary definitions and ohms law, to applications of vacuum tubes. Also has commonly used charts and tables. If you're interested in electronics, but need to start at the beginning, this book is for you. Great WW II stuff; over 50 years old, but still good info. 205 pages, 0.7 lbs. **B-758**

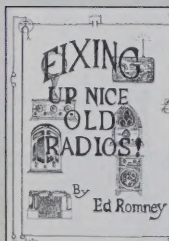
\$9.95



NEW LOWER PRICE

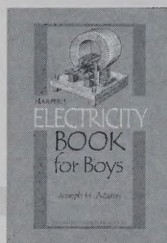
FIXING UP NICE OLD RADIOS! By Ed Romney. Easy to understand guide to antique radio repair covers everything from crystal sets to the Scott 800B! Uses photos of the insides of popular collectible sets to cover actual repair jobs in detail. Includes AK, Zenith, Bosch, Scott, National, Hallicrafters, Crosley 50, Radiola III, 17, 25, R-28, Philco and others. Explains Wunderlich, AVC, crystal filters, Scott and Zenith push-buttons and band-switches, alignment and more. 8 1/2" x 11" spiral bound. 170 pages, 1.2 lbs. **B-549**

\$33.00



HAMMARLUND SHORT WAVE MANUAL. Quality reprint of the Hammarlund 1937 Short Wave Manual, contains instructions for building 12 different, 1, 2 and 3 tube short wave receivers, complete with pictures, schematics and parts lists. 32 pages, 0.3 lb. **B-519**

\$4.95



HARPER'S ELECTRICITY FOR BOYS. By Joseph Adams. This illustrated reprint from 1907 is part of the Harper's "Tell Me How" Series of books. It has chapters on cells and batteries, push-buttons and switches, the telephone, telegraph and frictional electricity, just to name a few. You receive simple step-by-step instructions on how to build everything from telephones to electroplating tanks. Also has a lot of plans for building dynamos, telegraph keys and batteries. 407 pages, 1.0 lb. A great gift for boys and girls! While supplies last **B-780** **\$19.95**

THE HOW AND WHY OF RADIO APPARATUS. By H.W. Secore. A 1922 treatise on the various components used in radio construction including transformers, condensers, spark gaps, inductances, tuners, detectors, telephone receivers and radio amplifiers. Also included: how to make a wave meter and decimeter and how to measure inductance. 160 pages, 0.6 lb.

B-710

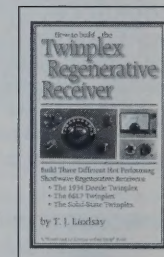
\$8.95



HOW TO BUILD THE TWINPLEX REGENERATIVE RECEIVER. By T.J. Lindsay. You can build the 1934 classic Doerle Twinplex. A single tube regenerative receiver powered by batteries! Simple, stable, sensitive and inexpensive. Great project for beginners or those who remember the joy of making your own radio. Includes designs for two other Twinplex receivers, one tube and one solid state. 63 pages, 1.0 lbs.

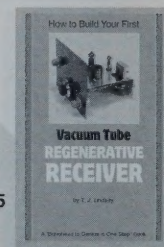
B-791

\$7.95



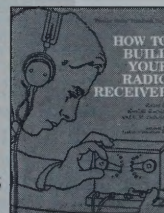
HOW TO BUILD YOUR FIRST VACUUM TUBE REGENERATIVE RECEIVER. By T.J. Lindsay. This book will coach you through building your first regenerative receiver. Learn the practical aspects of finding old components and using them toward your goal of building your own little radio. The set described is a real working receiver that was built from salvaged material on hand. 127 pages, 0.5 lbs. **B-774**

\$9.95



HOW TO BUILD YOUR RADIO RECEIVER. Classic construction text from 1924. Includes instructions on how to build 7 different receivers ranging from crystal sets to regenerative superhets. Aimed at beginners in 1924, includes section on 44 symbols commonly found in radio circuit diagrams. We wish we could supply all the parts needed in the projects, but we can't! 100 pages, 0.7 lbs. **B-699**

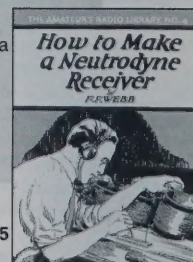
\$8.95



HOW TO MAKE A NEUTRODYNE RECEIVER. By F. F. Webb. A re-print of 1925 book which shows you how to build a radio like those used before the superheterodyne days. 12 chapters cover topics such as advantages of Neutrodyne, description of a neutrodyne set, vacuum tubes used, how to build the neutroformer, neutralizing condensers, neutralizing the set, antenna for set, operating and troubleshooting. Information can be used to build a set from scratch or to help you restore an original. 59 pages, 0.5 lbs.

B-763

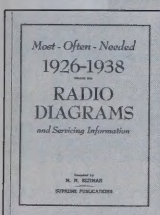
\$6.95



INSTRUCTIONS FOR ATWATER KENT OPEN MOUNTED RADIO RECEIVING SETS. High quality reprint of a 1929 Atwater Kent booklet showing photos and battery hook-ups for 14 different breadboard receivers. 12 pages, 0.2 lb. **B-600 \$5.95**



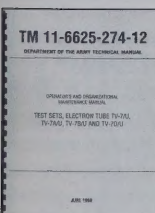
MANUFACTURE OF WIRELESS COMPONENTS. Reprinted by Lindsay Publications. Machinery's industrial secrets. Selected articles from early issues of Machinery Magazine revealing secrets of manufacturing. Articles include making radio parts, honeycomb coils for radio reception and winding resistance coils. 63 pages, 0.8 lbs. **B-808 \$6.95**



MOST OFTEN NEEDED 1926-1938 DIAGRAMS. A reprint of Morris Beitman's Supreme Publications book, showing circuit diagrams for 600 of the most commonly found radios of that time. A valuable resource for restorations. 240 pages, 1.4 lbs. **B-307 \$18.50**



OLD TIME RADIOS! RESTORATION AND REPAIR. By Joseph J. Carr. A well-written book on the history, theory and practical operation of old-time radio sets, with detailed instructions on how to repair them. Included is information on how vacuum tubes work, radio troubleshooting, alignment, test equipment, and repairing water damage. 256 pages, 1.0 lb. **B-570 \$19.95**



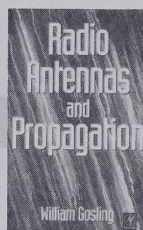
OPERATORS AND ORGANIZATIONAL MAINTENANCE MANUAL FOR TV-7/U, TV-7A/U, TV-7B/U AND TV-TD/U TUBE TESTERS. Reprint includes introduction and general description of tester, operating instructions, maintenance instructions and even instructions for demolition to prevent enemy use! Spiral bound. 44 pages, 0.3 lbs. **B-675 \$9.95**



OSCILLOSCOPES: SELECTING AND RESTORING A CLASSIC. By Stan Griffiths. The complete book of Tektronix oscilloscopes from 1950 through the early 1970s. Contains pictures and detailed descriptions of every model in the Tektronix line, along with information and tips on restoring these classics. 372 pages, 1.0 lb. **B-631 \$24.95**

PHILCO CONDENSERS AND MORE. By Ray Bintliff, W1RY, provides detailed data for Philco Bakelite block condensers, metal-cased condensers and tone controls. Pictorial guides show electrical connections and capacitor values. More than 300 illustrations. 68 pages. **B-830 \$14.95**

NEW!



RADIO ANTENNAS AND PROPAGATION. William Gosling. This book is a modern, comprehensive, and system-oriented text on radio engineering by a pioneer in the field. It covers radio system physics, radio antennas and propagation. This book is a must for those that are serious about radio. **B-809 \$39.95**

NEW!

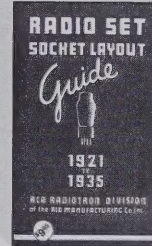
RADIO-CRAFT, 50 YEARS OF RADIO. Edited by Hugo Gernsback. A reprint of Gernsback's 1938 special issue of Radio-Craft magazine which commemorated the first 50 years of radio. Contains the reminiscences of radio pioneers DeForest, Sarnoff, Conrad, Crosley, McMurdo Silver and others, as well as the famous Gernsback predictions for the next 50 years. Also details the progression of the vacuum tube, mileposts in television and famous early radio circuits. 144 pages, hundreds of photos. 1.2 lbs. **B-373 \$15.95**



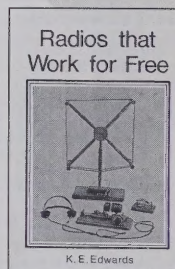
RADIO FOR THE MILLIONS. Prepared by the Editorial Staff of Popular Science Monthly, 1945. From vintage issues of Popular Science Magazine comes this re-print of well-illustrated electronics articles. Topics include phonographs and shortwave radios, cabinet design and radio servicing. Each article has sharp photographs, schematics, and parts lists. 192 pages, 1.0 lb. **B-781 \$11.95**



RADIO SET SOCKET LAYOUT GUIDE 1921 TO 1935. This reprint of a 1935 RCA publication shows tube complement, chassis layout and date of manufacture for thousands of radios produced by over 100 different manufacturers. It also contains a tube data chart and base diagrams for RCA receiving tubes. It is very useful for identifying unknown model numbers or determining which tubes belong in a set. 256 pages, 0.9 lb. **B-624 \$9.95**



RADIOS THAT WORK FOR FREE. By K.E. Edwards. An experimenter's handbook on crystal radios, this book includes instructions and theory for building many different crystal radio circuits. 140 pages, 0.5 lb. **B-341 \$12.95**

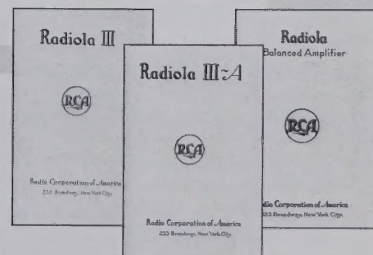


RADIO, WIRELESS TELEPHONE AND WIRELESS TELEGRAPH EQUIPMENT. High quality reprint of early (1920's) Montgomery Ward catalog of "wireless" equipment. 32 pages of radios, kits, tubes and books as available 70 years ago. Sorry, you can't order from this catalog! 0.2 lbs. **B-697 \$2.00**



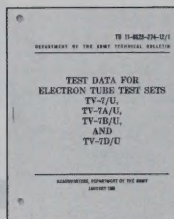
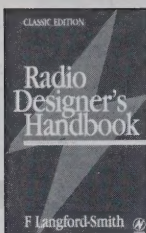
RADIOLA INSTRUCTION MANUALS. Reprints of the RCA instruction manuals, covering installation and operation of the Radiola III series units. 0.2 lb. each.

Radiola III **B-321 \$3.75**
Radiola III-A **B-344 \$3.75**
Radiola Balanced Amp **B-345 \$4.00**



RADIOTRON DESIGNER'S HANDBOOK, Fourth Edition. By F. Langford Smith (reprint). Here it is (and this time we mean it)! A full reprint from page 1 to 1498 of F. Langford Smith's bible for design of vacuum tube circuits. If you're looking for the original as a collectable, this is not for you, but if you're looking for the data inside, here it is. Hard cover. 1498 pages, 3.5 lbs.

B-795 \$69.95



TEST DATA FOR TV-7/U TUBE TESTER. High quality reprint of the test set-up manual for the military TV-7/U, TV-7A/U, TV-7B/U, and TV-7D/U versions of Hickok tube testers, normally supplied in the lid of the tester. Also contains operating instructions, conversion table for Army VT numbers, and data table for CV type tubes. 83 pages, 0.4 lb.

B-546 \$5.95

RCA RADIOLAS, RADIOTRONS, AND ACCESSORIES. A reprint of 1925 RCA promotional literature. 20 pages of pictures and information on models 30, Super VIII, 28, 26, 25, 20, III, and IIIA receivers and loudspeakers #100, 102, 104 and UZ-1325. 20 pages, 0.2 lb.

B-K15 \$4.00



READY SET GO! An Electronics Reference for the Everyman by Kevin O'Connor A handy reference for the novice electronic tinkerer and experienced craftsman alike. Informative and easy to read, the book explains: how to read schematic symbols; explains standard notation, S.I. symbols and tolerances; reveals the resistor color code; lists standard resistor values for 1%, 5%, 10% and 20% components; lists standard capacitor values and explains the colour coding of vintage caps; explains current, voltage, power, resistance, capacitance and inductance; explains Ohm's Law and how to figure out series/parallel resistance. Transformers and impedance are clearly explained. Examples are worked out throughout the book to illustrate how truly simple basic electronics is! 2 lbs., spiral bound, 84 pages.

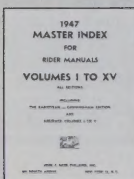
B-821 \$20.00

RIDER 1947 MASTER INDEX TO PERPETUAL TROUBLESHOOTER MANUALS. Covers volumes I through XV. High quality photocopy. 205 pages, 1.1 lbs.

B-331 \$19.95

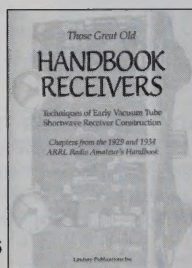
RIDER COMPLETE INDEX TO PERPETUAL TROUBLE SHOOTER MANUALS. Covers volumes XVI through XXII. 48 pages, 0.5 lb.

B-347 \$7.95



THOSE GREAT OLD HANDBOOK RECEIVERS. Chapters from the 1929 and 1934 ARRL Radio Amateurs Handbook. Chapters deal with detailed receiver theory, construction techniques and power supply secrets from the 1929 and 1934 editions of the ARRL Handbook. If you enjoy electronics, amateur radio, collecting, or just the history of technology, you'll get interesting insight into the beginnings of a technology so common today we almost take it for granted. 158 pages, 0.8 lb.

B-741 \$8.95



THE WEEKEND REFINISHER. By Bruce Johnson. Easy-to-follow guide teaches the basics of wood repair and finish restoration. Learn how to repair scratches, veneer chips, fill small holes, raise dents, remove water damage, identify and revive various finishes and more. 295 pages, 1.0 lb.

B-645 \$12.00

ZENITH RADIO BROCHURE BOOK.

Compiled by A. Jespersen & M. Emery. A nearly complete compilation of Zenith radio information from 1920 to 1946, photocopied from original sales brochures and other advertising. Includes 40 years of Transoceanic multi-band receivers. Hundreds of radios pictured. Over 50 pages, 11" x 17" spiral bound. 0.8 lb.

B-610 \$24.95



ZENITH RADIO SERVICE MANUAL AND PARTS LIST.

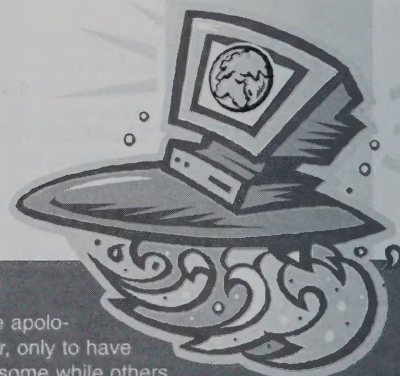
Re-print of early Zenith service manual. Includes schematics and parts lists for Zenith radios made from 1928 through 1939. Offers help with alignment procedures, antenna alignment, and gives parts lists along with tube layouts on most models. 510 pages, 2.6 lbs.

B-755 \$19.95



SECRETS OF HOMEBUILT REGENERATIVE RECEIVERS. By C.F. "Rock" Rockey. Discover the secrets of building regenerative shortwave receivers. These incredibly simple radios will amaze you with their unbelievable ability to pull in signals from every country on earth. All the secrets are here! 127 pages, 0.8 lb.

B-742 \$9.95



A FEW WORDS ABOUT OUR WEBSITE www.tubesandmore.com

We are aware that many of you have had trouble using our on-line ordering feature on our website. We apologize for the inconvenience and we understand how frustrating it is to spend time trying to place an order, only to have a problem occur. Unfortunately, the problem is hit and miss, we are successfully receiving orders from some while others encounter problems.

We are happy to announce that in mid September, 1999, we will have a totally new website! Completely revamped, it will have search capabilities by product line, part number or key word search. Dynamic page generation based on your search criteria will mean faster page loading with only the information you want. Integration with our inventory control system will allow us to have the web site up to date at all times. You'll know when you place your order if we are out of stock of a particular item. You'll also be able to see the status of your order on-line. We are excited about our new web site, and hope you'll stop by and take a second look.



COLLECTION EXPLORER

Now you can know exactly what's in your basement, with **Collection Explorer**. Designed for Windows 95/98/NT, **Collection Explorer** helps organize and track your radio collection. You can group your collection into categories, and customize the way item information is stored and viewed.

Collection Explorer is designed to look and operate like Microsoft's Windows Explorer. This makes it easy to use, since many people are already familiar with the Windows Explorer.

The program comes pre-loaded with many categories for radios, parts, tubes, etc, and you can add your own. Items can be imported from other programs, and a variety of reports can be printed.

Collection Explorer lists your categories in a "tree". Categories can contain subcategories, and so on. You can drag-and-drop items and categories to arrange your collection as you see fit.

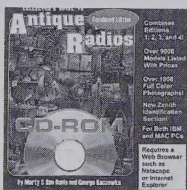
You can also create custom columns to hold information about the items in your collection, such as each item's name, the quantity in your collection, its value, etc. You specify the name of the column, the type of data it will hold (such as "Date" or "Currency") and the maximum number of characters the column will hold. Each item can also have an attached photo and memo.

Collection Explorer's default categories are geared toward radio collecting, but it can be used to track any type of collection you may have. Comes on 3 1/2" disks.

B-CD033 \$39.00

COLLECTOR'S GUIDE TO ANTIQUE RADIOS ON CD ROM

By Marty and Sue Bunis and George Kaczowka



One of the most comprehensive guides to antique radios available today on one CD-ROM! Combines information from all 4 editions of Bunis' popular "Collector Guide" series. Over 9000 models listed with prices, over 1800 full color photographs. Includes model number index for all manufacturers, as well as photo index by category: floor, table, portable, cathedral/tombstone. Also includes a new Zenith identification section indexed by model, chassis or serial number. Includes tube complement and service information. Both IBM and MAC computers. **REQUIRES A WEB BROWSER SUCH AS NETSCAPE OR INTERNET EXPLORER!** The data contained on the disk is in web format (html) and requires a browser to view. You DO NOT need an internet connection to use this product. 1.0 lbs.

B-CD030 \$39.95

TUBE DATA

The most comprehensive listing of vacuum tubes and data ever produced is here in an easy-to-use computer program for PC's. **TUBE DATA** covers over 27,000 tube types from the United States, Canada, Great Britain, Holland, Germany, Russia and other countries. Both receiving and transmitting tubes are included, ranging from antique to modern, with military and foreign designations as well. Even Russian types, which contain characters in the tube number not found in Latin based alphabets, can be entered from the keyboard - by pressing the Alt-key along with a letter key. **TUBE DATA** displays two windows (not a Windows program) on the screen simultaneously, so that data from two different tubes can be displayed and compared together. Displayed are the tube function, manufacturer, year of introduction, variations, technical data and a pinning diagram. This is an ideal aid for tube collectors, circuit designers, historians and anyone making tube substitutions in vacuum tube equipment. On one 3 1/2" diskette for IBM compatible computers.

B-CD026 \$39.95

VT DATA

For IBM PC and compatibles, this package is a complete Tube Manual on your computer. It has all the information expected in a tube manual, plus several new, powerful features. You can look up specs and pin outs, search for tubes that meet your specs, and find substitutes. VTDATA also provides features for maintaining your personal tube inventory.

Intended for designers, repairmen, and collectors, VTDATA's database contains electrical specs for over 1200 of the most commonly found tubes, including tubes of historical interest, such as the early "two digit" types and hi-fi audio types. DOS 4.01 or higher, or Windows required. 3.5" disk.

B-CD029 \$29.00

Audio Gadgets

Select desired page by clicking on page tab.

GlassWare Copyright 1996, 1997 Audio Gadgets Version 1.1

AUDIO GADGETS is an audiophile utility program for Windows 3.1 / 95™. **AUDIO GADGETS** saves you the hassle of looking up formulas in reference books and keying up the programmable calculator every time some audio math problem comes up. If you have ever tried to design a 48 position series stepped attenuator, you will appreciate just how much labor, time and fear of having made a mistake that compounds throughout the process. This can be avoided by using **AUDIO GADGETS**. Just as there are calculators for financial computation, the best metaphor for understanding what **AUDIO GADGETS** does is a calculator for audio design. Like the financial calculator, **AUDIO GADGETS** pre-formats both the input and the output data; e.g., coupling caps come in micro-farads, not farads and tube plate load resistors, kilo-ohms, not micro-ohms.

Ten pages of audio topics (and one page for user options) make up the notebook format. By clicking on a page tab the topic page is brought forward for use. Topics include attenuators, Op Amp Circuits, power supplies, filters, regulators, speaker design, many tube circuits and more. Print previews and report printing add to the program's usefulness. Includes 40+ page user manual which is informative by itself. 3.5" diskette.

B-CD027 \$49.95

ALSO FROM GLASSWARE.....TUBE CAD

The tube audio circuit Computer Aided Design program for Windows 3.1/95. This program covers 13 types of tube circuits, each one divided into four variations. Thus, **TUBE CAD** covers 52 circuits in all. A notebook format is used, with 13 pages, one for each circuit type. Clicking on the tabs at the bottom of the program brings up that circuit page. Circuit variables such as tube type, B+ voltage, plate and cathode resistor values, and coupling capacitor value are entered in field boxes, or changed using a slider control. The AC and DC results are then displayed. **TUBE CAD** includes data for 32 triode tube types. If you wish to work with tube types not included you can define characteristics for any triode you wish. You can display and print characteristic curves of tube types included with the program. Once you've defined all your circuit variables, **TUBE CAD** can search for and alert to error conditions in the circuit. Fix your error or let **TUBE CAD** do it for you! Print previews and report printing add to the program's usefulness. Includes 40+ page user manual which is informative by itself. 3.5 diskette.

B-CD028 \$39.95

AND ALSO FROM GLASSWARE...SE AMP CAD

The new Windows program that helps you design, understand and modify single-ended amplifiers. Prior to this program, only three ways realistically presented themselves to the designing of a single-ended amplifier. The first was to break out old tube manuals, textbooks, ruler, calculator, and lots of scratch paper. Second was taking out the soldering iron and build, test, and change components and test until your design was proven undesirable. The third way was to learn to use one of the many variations of SPICE and try to model the output tube and transformer as well as you could. Now SE Amp Cad offers an alternative! SE Amp CAD is the quickest, easiest way to model, evaluate, and understand a tube single-ended output stage. **SE Amp CAD's** addresses single-ended tube output stages and is useful to those who want to understand and design single-ended amplifiers. It displays output data results, output circuit schematic, tube plate curves, input signal and resulting output signal--all interactively.

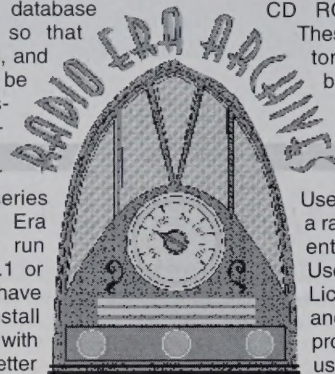
Results of calculations are divided into several groups pertaining to the output transformer, the output tube, the maximum ratings output tube, the current-voltage relationships that the output stage will experience because of the specified input voltage swings, the output stage (output tube, cathode resistor and bypass capacitor) and the load being driven by the amplifier. As circuit variables are changed, SE Amp CAD updates the display of the results, making it easy for the amplifier designer to inch the desired outcome. 3.5" diskette.

B-CD031 \$39.95

TUBE CAD & SE AMP CAD PACKAGE

B-CD032 \$79.00

Radio Era Archives developed the and 8MB of RAM memory (and RadioView digital database CD ROM) is required. software system so that These are the only historical and troubleshooting related schematics, books, and magazines could be searched for, displayed on the computer screen and printed. We offer three separate series from Radio Era Archives. They run under Windows 3.1 or Windows 95 and have an automatic install program. A PC with VGA monitor or better



products on the market with a full database search engine. User can print 1 page, a range of pages or an entire publication. User is restricted by License Agreement and Copyright to use product for personal use only.

RADIO REPAIR SERIES

Antique Radio Repair - Vol. 1 - A single CD with the most sought after information required for the repair and restoration of antique radios & phonographs! Contains troubleshooting information, radio theory, technical reference and much more on a single CD. If you are new to antique radio, this should be a MUST purchase to enable you to find your way into this fabulous hobby or avocation! **B-CD010 \$85.00**

Theory:

- Radio Theory and Operating by Mary Texanna Loomis - 848 pages - very famous author of radio circuit design.
- Understanding Radio by National Radio Institute - 345 pages in 12 books covering all aspects of radio repair.

Technical Reference:

- GE Receiving Tube Manual - 302 pages of invaluable tube reference data and information.
- Tube Substitution Manual - 111 pages of tube substitution information.
- Bernards Tube Substitution Manual - 44 pages of English/European tube substitution data.
- Cunningham Reference Manual 1927, 214 pages of radio tube/radio cross reference data.
- Reading Radio Diagrams by American Technical Society - 1927 - 114 page book of how to read radio schematics.

Radio Repair:

- Profitable Radio Repairing - Marcus, 1956, 330 page book of how to effectively repair radios in a minimum of time.
- How It Works - Rider, special publication by John F. Rider from the Perpetual Trouble Shooters Manuals, volumes 8-11, 15-17 and the P.A. Manual. 504 pages of highly descriptive information on radio circuits and the analysis thereof.

RIDER MANUALS SERIES

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- Dr. A. Ghirardi's - Most Radio Receiver Problems, 1947, 702 pages
- Philco Service Division - Philco Radio Servicing and Alignment, no date, 35 pages
- Atwater-Kent, Servicing Data, 1928, 98 pages
- Atwater-Kent, Electrical Data, 1932, 24 pages
- Atwater-Kent, Parts Data, 1928, 64 pages
- National Radio Institute - a complete series of "How To" books on theory, troubleshooting and servicing, 1927-1937, 12 books, 375 pages

Reference

- John F. Rider, Perpetual Troubleshooters Manual Index - Vol. 1-15, 1947, 206 pages
- John F. Rider, Perpetual Troubleshooters Manual Index - Vol. 16-22, 1951, 47 pages
- John F. Rider, Perpetual Troubleshooters Manual Index - Vol. 23, 1954, 71 pages, includes parts lists and cross-references
- General Electric, Receiving Tube Reference Manual, 1962, 302 pages
- ARRL Handbook, Amateur Radio Handbook, 1955, 764 pages
- RCA - Cunningham "Radiotron Tube Reference Book", 1933, 161 pages

Old Radio Information

- Hugo Gernsback, Radiocraft Magazine - Jubilee Issue, March 1938, 146 pages
- Radio Trade Journal, 1925, 194 pages
- Hugo Gernsback, Quiz Book & Kinks - Shortwave Radio, 1938, 65 pages

Radiophile Volume 2 - A terrific radio reference! The fabulous Hugo Gernsback's Official Radio Service Manuals - a wealth of information in 6 rare, hard to find volumes! The complete Zenith Serviceman's schematics with parts listing! Radio data, troubleshooting tips, reference information, Old radio schematics in an easy to use electronic reference containing over 5,600 pages on a single CD!

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- Hugo Gernsback - Official Radio Service Manual - 1934, 397 pages
- Hugo Gernsback - Official Radio Service Manual - 1935, 1,009 pages
- Hugo Gernsback - Official Radio Service Manual - 1936, 1,200 pages
- Zenith Radio - Official Serviceman's Guide - Vol. 1, 1,004 pages
- Zenith Radio - Official Serviceman's Guide - Vol. 2, 1,004 pages
- Zenith Radio - Official Serviceman's Guide - Parts Listing, 182 pages

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• Radio for Everybody - by Austin Lescarboua of John Rider and Scientific American fame. 1922 edition of a layman's non-technical book of radio, what it does, how it works, etc. The perfect book for the non-technical radio buff in easy to understand form. Very rare radio book with 334 pages, many illustrated, of historical radio information.

• The Radio Manual - by George Sterling. 1940 technical manuals encompassing 1,120 pages covering all aspects of the radio art and radio theory. A great technical reference manual or for detailed study of specific elements of radio.

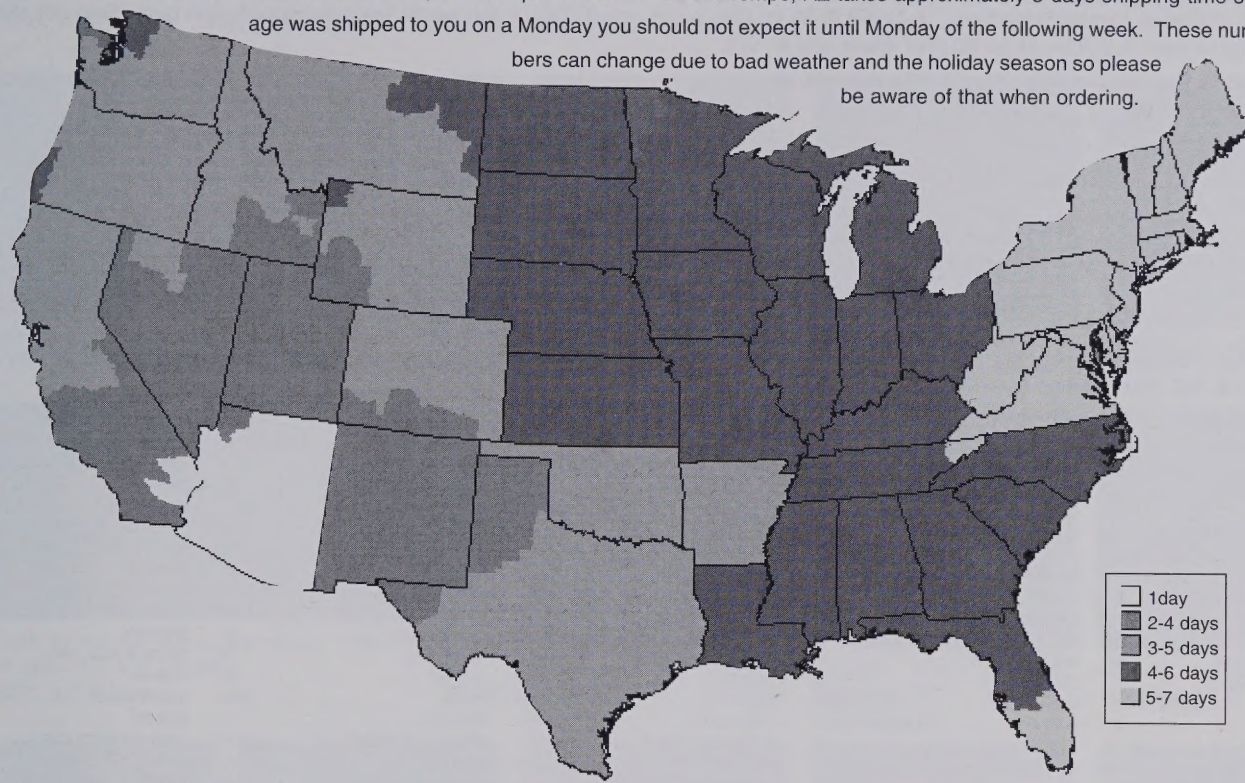
• RCA Radiotron Designers Handbook - 3rd Edition - 1945 "Bible" of radio books. This hard to find book is one of the more famous books containing circuit analysis and theory of radio, yet in an easy to understand format. One of the most sought after books with valuable data for radio collectors and persons repairing/restoring old radios. Over 352 pages.

• Tube Substitution Handbook - 111 pages of cross-references of tube substitution information.

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• Cunningham 1927 Tube to Radio Cross-Reference - 214 page book containing tube data for older radios. Very useful in classifying the model and make of a radio by tube layout information.

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10 - 14	5.72	6.00	6.50	7.63	8.97	10.17	8.10	24.10
15 - 20	6.74	6.99	8.00	9.82	11.62	13.47	10.35	28.79
21 - 26	7.76	8.25	9.60	12.04	14.17	16.72	12.55	34.82
27 - 32	8.73	9.56	11.21	14.26	16.77	19.97	14.75	39.51
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40 - 50	11.64	13.17	16.00	19.87	24.52	28.92	21.35	53.71

Cloth is custom made to duplicate early radio speaker cloth. Colors may vary somewhat due to different lots and fabrics used. Width of each cloth is shown.

The exact coloring and patterns of the grill cloth are very hard to reproduce on the next page. If you would like a small sample to evaluate before making your purchase, they are available: first two samples are free, additional samples are \$0.50 each. If you would like a sample of each radio type grill cloth available, please order item S-GSRI @ \$9.00 (this saves you \$2.00). If you would like a sample of each guitar type grill cloth available, please order item S-GSG-1 @ \$3.00 (this saves you \$1.00).

Here are some radios that our different grill cloth is made for:

S-G426 Same pattern as the S-G432, except in silver, made for Emerson Models.

S-G429 Philco Model 60 for years 1934, 1935, and early 1936 (See S-G440 for late 1936 and beyond).

S-G431 Philco Models 70, 90, 89, 19; Zenith Models 8-S-463, 9-S-367; Grunow, Crosley and other Models from the late 1930's.

S-G432 For Emerson Models.

S-G434 RCA 100A Speaker.

S-G435 RCA, GE, and Westinghouse Models.

S-G440 Philco Model 60 late 1936 and up.

S-G960 Zenith Consoles from the late 1930's.

S-G961 Smaller Zenith Consoles from the late 1930's.

S-G962 Larger Zenith Consoles from the late 1930's.

S-G963 Zenith, Fada, Silvertone from the 1930's.

S-G964 Deco looking consoles from 1937.

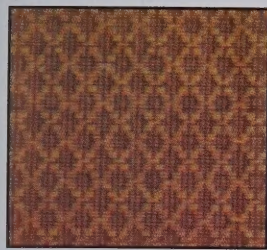
S-G965 Shutterdale and Walton, Tombstone Sets, this cloth is reversible.

S-G966 Philco Models from late 1939 and 1940.

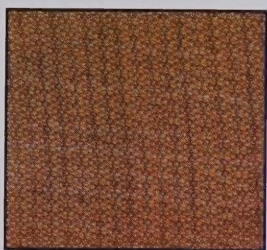
S-G967 Zenith Consoles from the 1940's.

AC CORD PLUGS	27	CAPACITORS, WIMA BRAND	23	GRID/PLATE CAPS	14	PC BOARD ITEMS	46,49	SOFTWARE	69-70
ACCUTRONICS REVERBS	40	CASTERS	41	GRILL CLOTH INFORMATION	72	PHONE PLUGS	52	SOLDER	53
ADAPTORS	14	CAT'S WHISKERS	32	GRILL CLOTH, GUITAR	INSIDE COVER	PHONO HARDWARE	31,48,49	SOLDER LUGS	50
ADHESIVES	41, 46	CEMENTS	46	GRILL CLOTH, RADIO	INSIDE COVER	PHONO PICK-UP WIRE	31	SOLDERING IRONS	53
AES GIFTS & SHIRTS	36, 37	CHASSIS BOXES	34	GRILLS, SPEAKER	41	PHONO PLUGS	27	SOLENS CAPS	22
AES HAT	36	CHASSIS PUNCHES	53	GROMMETS	31,48	PHONOGRAPH BOOKS	60	SPAGHETTI	52
AF GENERATORS	54	CHASSIS STRAPS	40	GUARANTEE INFO	1,3	PHONOGRAPH NEEDLES	31	SPEAKER GRILLS	41
ALIGNMENT TOOLS	53	CHEMICALS	46,47	GUITAR STRINGS	40	PILOT LIGHTS	30	SPEAKER WIRE	27
ALLIGATOR CLIPS	50	CHOKES	19	GUITAR STUFF	40,41	PLASTIC BAGS	51	SPEAKERS	42-45
ALUMINUM ENCLOSURES	34	CIRCUIT TESTER	54	HAMMOND PRODUCTS	16-19,34,35	PLATE CAPS	14	SPRAGUE ATOM CAPS	22
AMP BIASING EQUIPMENT	41	CLEANERS	46	HANDLES	41,52	PLATING	47	SPRINGS	50
AMP CLOTH	INSIDE COVER	CLIPS	14,31,39,48,50	HARDWARE	50	PLUGS	27,52	STRAIN RELIEF	27
AMP HANDLES	41	CLOTH	72,INSIDE COVERS	HEADPHONES	33,42	POLICIES	1	STRINGS	40
AMP KNOBS	40, 41	COD INFO	1	HEAT SHRINK TUBING	52	POLISH & CLEANERS	46,47	SVETLANA PRODUCTS	38,39
AMP WHEELS/CASTERS	41	COIL FORMS	33	HOBBY MOTORS	51	POSTERS	37	SWEEP TUBE GUARANTEE	1,3
ANTENNA COILS	49	COILS	49	HOOK-UP WIRE	27	POTENTIOMETERS	21,22	SWITCHES	48,51
ATTENUATORS	22	COILS, INDUCTOR	19	HOURS OF OPERATION	1	POWER CORDS	27	TELEGRAPH KEYS	37
AUDIO BOOKS	63, 64, 65	CONNECTORS	50	I.F. TRANSFORMERS	48	POWER RESISTORS	20	TERMINAL BOARDS	49
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BANANA PLUGS	48	CORDS	27	INDUCTOR COILS	19	POWER SUPPLY KIT	33	TEST ACCESSORIES	53
BATTERIES	31	CORNERS, AMP	41	INDUCTORS, VARIABLE	19	POWER TRANSFORMERS	15,16,18	TEST EQUIPMENT	53,54
BATTERY CONNECTORS	31	CRATING	14	INSULATING MATERIALS	51	PROJECT BOXES	34	TILT BACK LEGS	40
BATTERY HOLDERS	31	CRYSTAL DETECTOR	33	INSULATORS	27	PUNCHES	53	TOLEX	INSIDE COVER
BELTS	29	CRYSTAL DIODES	31,33	JACKS	48,49	PUSHBUTTONS	28	TOLEX ADHESIVE	41
BIAS KINGS	41	CRYSTAL EARPHONE	33	JENSEN SPEAKERS	43	PUSH-PULL TRANSFORMERS	17	TOOLS	53
BINDING POSTS	48	CRYSTAL RADIO KITS	32,33	JEWELS	30,41	R.F. CHOKES	19	TRANSFORMERS	15-19
BOOKS	55-68	CRYSTAL SET ITEMS	32,33	JUKEBOX BOOKS	60	RADIO COLLECTING BOOKS	57-60	TRANSMITTER KITS	32
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BOOKS, EARLY TELEVISION	62	CRYSTALS	32	KNOB BRIGHTS	28	RADIO DIAL MATERIAL	29	TUBE BASES	14,34
BOOKS, GUITAR	61	DATA BOOKS	55,56	KNOB FELT	28	RADIO DIALS, PHILCO	29	TUBE BOXES & CRATING	14
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BOOKS, RADIO COLLECTING	57-60	DIAL BELTS	29	KNOBS AND PUSHBUTTONS	28,38,39	RADIO KNOBS	28	TUBE INFO	3
BOOKS, SPEAKER	65	DIAL CORD	29	LACQUER	47	RADIO SCHEMATICS	66	TUBE MATCHER	54
BOOKS, TECHNICAL	65-68	DIAL GLASS	29	LAMP HOODS	29	RCA CABLE	27	TUBE MATCHING INFO	3
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BRIDGES	31	DIALS	29	LETTERING	29,30	REFINISHING PRODUCTS	47	TUBE SET SPECIALS	52
BULBS	30,41	DIODES	31,33	LIGHTS	30,41	REPAIRS, SERVICE	2	TUBE SHIELDS	14
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CABINET CORNERS	41	ELECTROPLATING	47	LINE ISOLATION TRANSFORMERS	18	RESISTANCE WIRE	27	TUBE TESTER	54
CABINET COVERING	INSIDE COVER	EMINENCE SPEAKERS	44,45	LOGOS, FENDER	36,40	RESISTOR INFO	20,21	TUBES	4-11,52
CABINET RESTORATION ITEMS	47	ENCLOSURES	34	LUBRICANTS	46	RESISTORS	20-22	TUBING, HEAT SHRINKABLE	52
CABLE TIES	50	FAHNESTOCK CLIPS	50	MAGNET WIRE	27	RETURN POLICY	1,3	TUBING, INSULATING	52
CAIG PRODUCTS	46	FANS	51	METERS	54	REVERB TANKS	40	TUBING, SHIELDING	51
CALENDAR	CENTER	FASTENERS	50	MOTORS, HOBBY	51	RF GENERATORS	54	TUNING BELTS	29
CAN CAPACITORS	25	FELT	28	MOUNTING CLAMPS	26	ROTARY IMPEDANCE SELECTOR	18	VACUUM TUBES	4-11,52
CANNED AIR	46	FENDER HATS	36	MOUNTING PLATES	26	RUBBER EXTRUSION	29	VARIABLE CAPACITORS	25,26
CAPACITOR INFO	23,24	FENDER LOGOS	36,40	MUGS	37	RUBBER FEET	48	VARIABLE INDUCTORS	19
CAPACITOR KIT	24,26	FENDER T-SHIRTS	36	MUSIC BOX	37	RUBBER GROMMETS	31,48	VARIABLE RESISTORS	21,22
CAPACITORS	22-25	FERRITE RODS	49	NEEDLES	31	RUBBER WASHER	52	VIBRAPADS	51
CAPACITORS, CERAMIC DISC	26	FILAMENT TRANSFORMERS	19	NIPPER DOGS	37	SCHEMATICS	66	VIBRATORS	31
CAPACITORS, ELECTROLYTICS	25,26	FILTER CHOKES	19	OIL	46	SCREWS	50	VIDEO CASSETTES	55
CAPACITORS, METALIZED TUBULAR	23	FINISHING PRODUCTS	47	ONE ELECTRON PRODUCTS	15	SEALER	47	VOLUME CONTROLS	21,22
CAPACITORS, MISCELLANEOUS	26	FISH PAPER	51	ORDER FORM	CENTER	SHELLAC	47	WASHERS	31,50,52
CAPACITORS, MULTI-SECTION	25	FUSE BLOCKS	48	ORDERING TUBES	3	SHIELDS, TUBE	14	WASHERS, CHASSIS MOUNT	52
CAPACITORS, ORANGE DROP	24	FUSES	30,48	OSCILLOSCOPE	54	SHIRTS	36,37	WHEELS/CASTERS	41
CAPACITORS, RADIAL LEAD	25	GALENA CRYSTALS	32	OUTPUT TRANSFORMERS	15,17,18	SHORT-WAVE RADIO KITS	33	WIRE	27
CAPACITORS, SILVER MICA	26	GENERAL INFO	1	PAINTS	47	SIGNAL TRACERS	54	WIRE NUTS	50
CAPACITORS, TRIMMER	25	GENERATORS	54	PANEL MATERIAL	29	SINGLE-ENDED TRANSFORMERS	15,17		
CAPACITORS, VARIABLE	25,26	GIFT CERTIFICATES	30	PANEL METERS	54	SOCKETS	12-14		
		GIFTS AND NOVELTIES	36,37	PATCH CORDS	51				

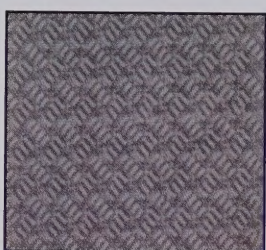
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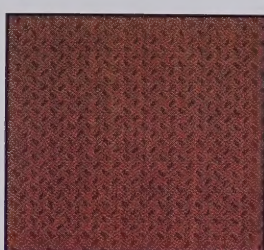
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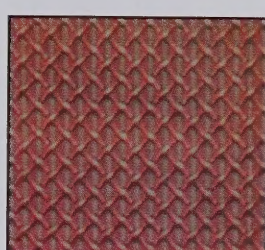
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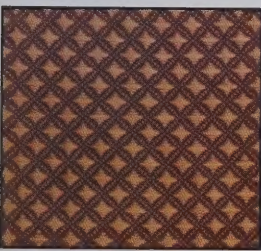
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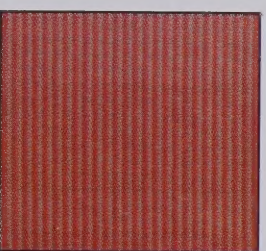
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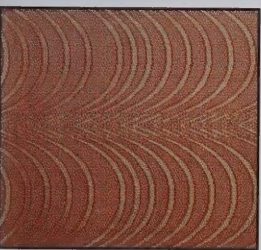
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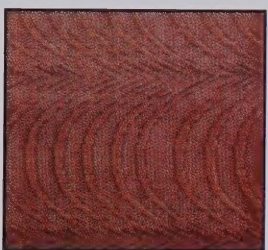
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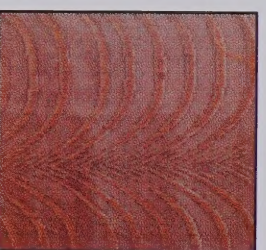
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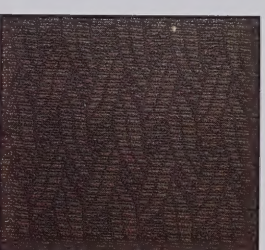
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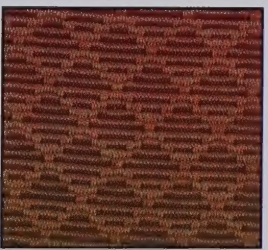
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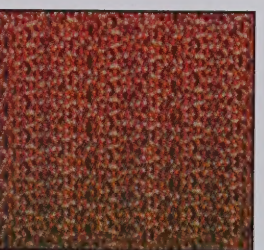
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ANTIQUE ELECTRONIC SUPPLY

2000 CATALOG

On the covers...

Zenith's magnificent
25 - tube Stratosphere,
Model 1000 - Z.

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approximately 400
were sold. This
beautiful example is
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